Britain's No.1 CPC magazine!

BRITAIN'S BEST-SELLING MAGAZINE FOR THE AMSTRAD

ISSUE NO.85 OCTOBER 1992 £2.50

Future PUBLISHING
Your guarantee of value

CPC

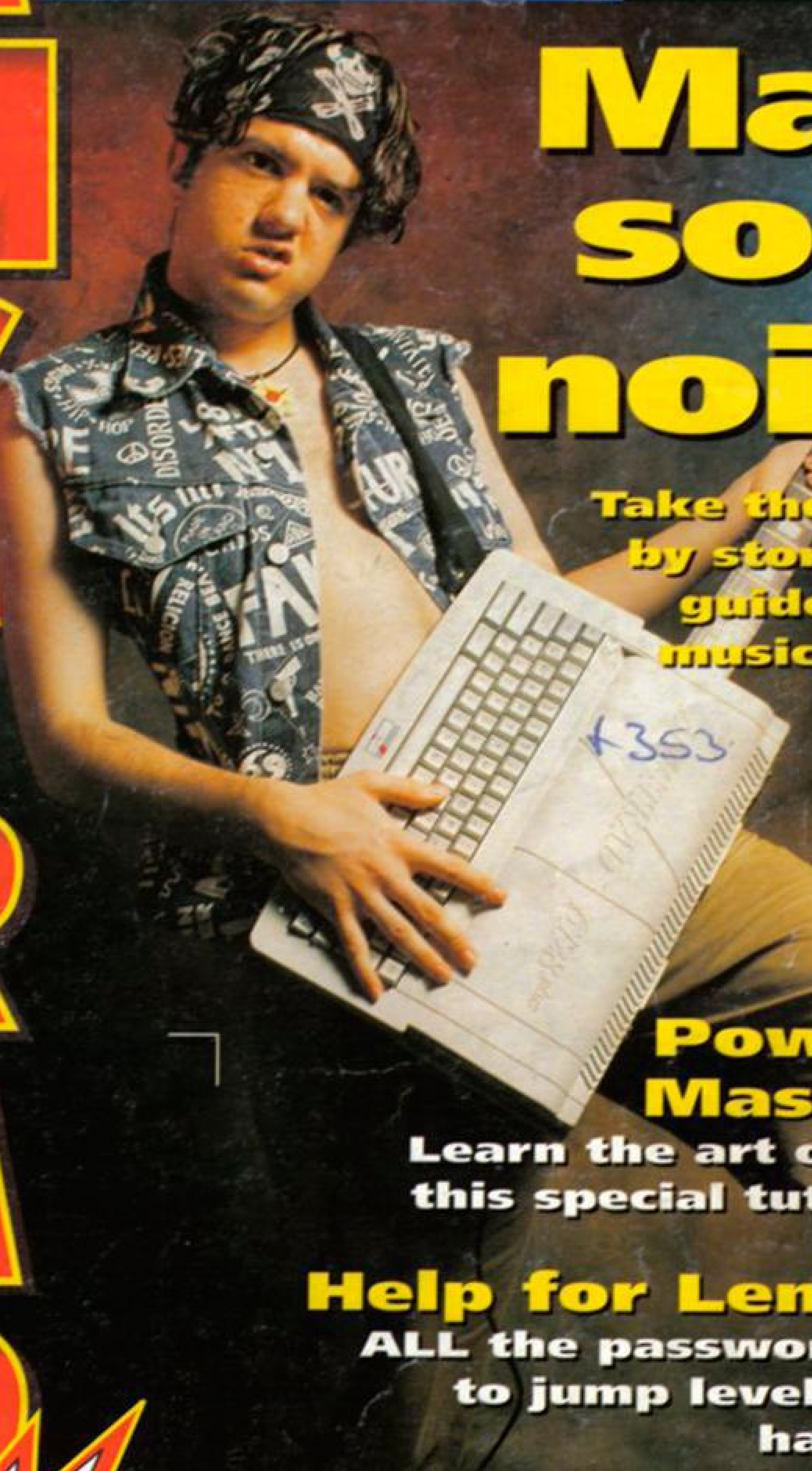


PLUS



AMSTRAD ACTION

NOT an official Amstrad publication!



Make some noise!

Take the pop world by storm – the full guide to making music on the CPC

PowerPage Masterclass

Learn the art of DTP with this special tutorial series

Help for Lemmings!

ALL the passwords, a cheat to jump levels and some handy hints...

American Tag Team Wrestling

Does Zeppelin's budget grappler thrash WWF?



Is your covertape missing? Then ask your newsagent! Or else you'll miss out on TWO full games, TWO top utilities and loads of pokes...

ALSO ON DISK!

Want a disk version of the covertape? (6128 Plus owners take note) See the tape pages for ordering details.

Line u

Regulars

ACTION pack

Stand by for some stonking CPC software – this month's covertape boasts all these droolsome progs:



1 On the Run

Something's gone horribly wrong in a chemical warfare experiment, and you have exactly one hour in which to find six dangerous flasks before they become 'active'. No problem! Except you've got to find them first



2 Link

Link is like the game Connect-4 – except that as soon as one player gets a row of four counters, these counters disappear and the game goes on. The extra gameplay comes from what happens when counters drop down into the spaces left by the completed rows. Very tricky stuff...



3 Pokes Galore!

This month we've got cheats for all the following top Amstrad games: Multimixx 4, Super Seymour, Puffy's Saga, Stryker demo and Anarchy (AA80 covertape), Bombfusion, Robocop, Frankenstein Junior, Combat School, classic shoot-em-up R-Type and Wonderboy!



4 Worktop

Ever fancied a WIMP front end, like those sported by flashy 16-bit machines? Richard Fairhurst's excellent interface does it all – it looks a hundred times better than Amsdos, and it's a hundred times more useful!



5 Disk Organiser

OK, here's a little question for you. Do you know which disks your files are on? Yes? Then you're a smarmy geek. No? Then you need the brilliant Disk Organiser.

Just turn the page for all the details →→→

ACTION pack On the Run

Can you find six canisters of a deadly chemical cocktail before they become 'active'? Things have already got a bit nasty, mind, what with these deadly mutant plants all over the place...



Loading: On the Run is the first item on the menu. (Rewind to the start of Side 1 and press CTRL + ENTER to load the menu.) Make sure it's the program highlighted, then hit the Enter key to load it.

We've got a problem. Actually, we've got several problems. The first is that we live in a world where governments indulge in chemical warfare experiments. The second problem is that the bods in charge of this experiment have dropped a bit of a clanger, and contaminated the area with deadly substances. The third problem is that there are also six flasks located somewhere within this area, and in one hour's time they're going to do something unmentionably horrible (well, the instructions didn't mention it, and we assume it's horrible).

Just three problems, then? No, not really... problem four is that this 'area' is in fact a vast maze made up of some 300 screens. Problem five is that it's inhabited by all sorts of mutant plants which whizz around trying to do you in. Problem six, of course, is that it's all down to you to find those flasks...

To be honest, you're more likely to peg it through contact with the indigenous wildlife (contact saps your protective suit's energy, you see) than run out of time. Your time limit is a whole 60 minutes, which is a long time to spend fighting off bioluminescent cabbages with wings.

The controls are pretty easy-peasy. Joystick left and right to control direction and up and down to move, er, up and down. Pressing Fire shoots the nasties. The main options screen lets you define keys.

On the Run controls
Keyboard or joystick control

Z	Left
X	Right
M	Fire
N	Thrust
, (comma)	Centre screen
Spacebar	Smart bomb

What does it mean?

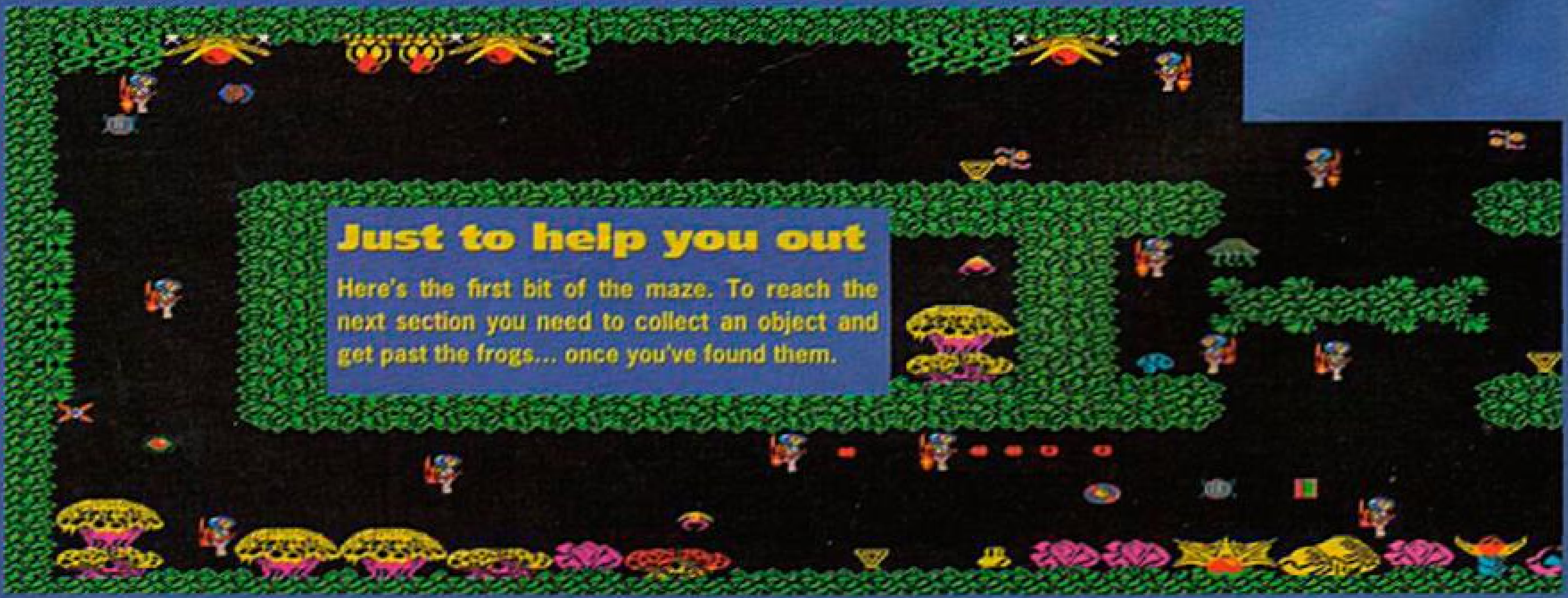




If it moves, shoot it. If it doesn't, collect it. We can thank the original instructions for these two pearls of wisdom...

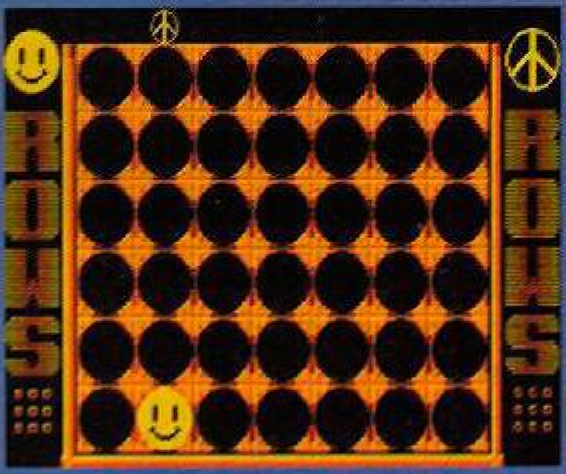


Yikes! Contact with the mutant monsters (in this case, a deformed dinner-plate) will severely sap your energy.

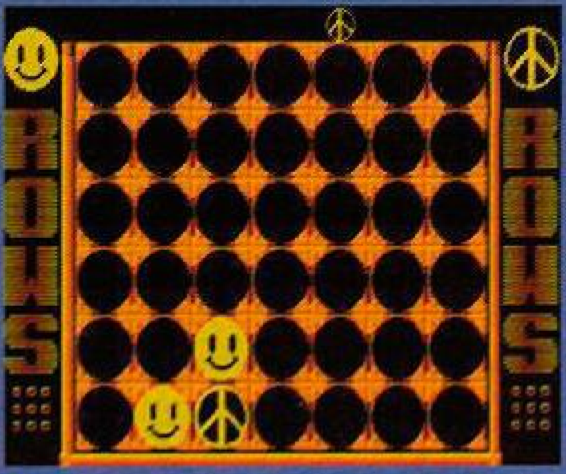


Just to help you out

Here's the first bit of the maze. To reach the next section you need to collect an object and get past the frogs... once you've found them.



1 Player one (smiley) goes for a cunning pincer move. Well, it will be later...



2 Player two (nukey) blocks it, but smiley presses home his advantage.

Link

Never mind all this childish arcade-style nonsense. What we want is a bit of yer actual intellectual challenge, like. Which is what you get with this excellent two-player puzzler...

Loading: *Link* is the second program on Side 1 of the tape. You load it direct from the main menu.

Ever played *Connect 4*? If you have, you don't need to be told the rules (*unless you're a cheating gimp like Adam – ed*).

You start off with an empty grid 7 slots wide and 6 slots high. Each player in turn drops a counter down one of the slots, where it either drops to the bottom or sits on top of any counters already dropped down that slot.

The aim is to form a line of four counters. This line can be horizontal, vertical or diagonal. Now in *Connect 4* you've won the game when you do this. In *Link*, though, as soon as someone gets a line, the counters in the line disappear, Tetris-style, and the counters above drop down one.

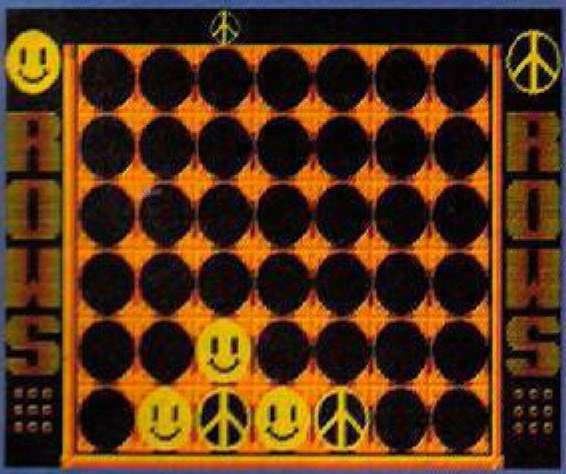
This makes things a whole heap more complicated. You might get a line, only to have your opponent score one as a result, because of the counters dropping down. Or you might leave them in a plum position so that your enemy can score with their next go. What's more, once you've scored a row over your opponent, they've got more counters in the playing area...

Hmm – it all gets very tactical. Particularly since the winner is the first person to get nine rows rather than just the one (you can set other numbers than nine). In practice, though, the winning margin is seldom more than one row, since the person who's trailing has at least four more counters on the screen.

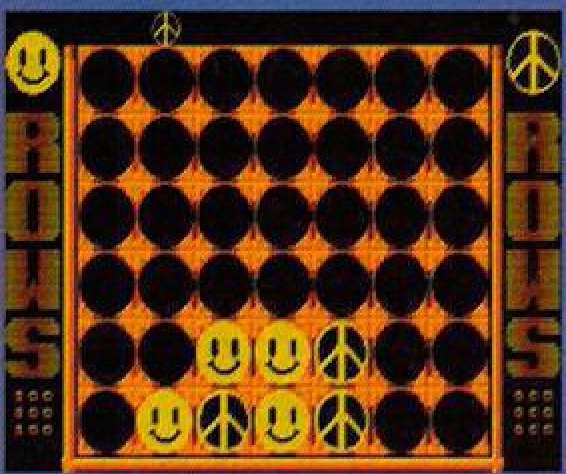
By the way, *Link* is from New Zealander Jeroen Erkens, the man who brought us the rather excellent *Balldozer* on the *AA70* covertape.

Link controls
Keyboard control

Q ....Player 1 Left
W ....Player 1 Right
Z ....Player 1 Drop
O ....Player 2 Left
P ....Player 2 Right
. (full stop) ....Player 2 Drop
Esc .....Return to menu screen



3 Nukey has a plan. Smiley spots it straight away and goes in for the kill.



4 Nukey drops a counter at random, and smiley starts reading the instructions...

How to load your covertape

Just pop the tape into your machine, making sure it's rewound to the start of Side 1, and then press CTRL + ENTER (or type RUN""), then press any key and the tape will start loading.

Within a few moments you get a menu screen. Choose the program you want using the Spacebar, then hit the Return key.

On the Run and *Link* are on Side 1 of the tape, together with the game pokes. *Worktop* and *Disk Organiser* are on Side 2.

- Note that the game pokes, *Worktop* and *Disk Organiser* are not loaded directly from the menu. Instead, you have to quit back to BASIC and use the RUN"(filename)" command.
- *Worktop* and *Disk Organiser* are for disk users only. They can't be run from tape, and must be transferred to disk before.
- If you have a disk drive either built into your machine or plugged in, you will first have to type Itape to switch the computer to tape loading. You get the I character by pressing SHIFT+@. Then just proceed as normal.

Disk owners!

The covertape contains its own tape-disk copying program. To transfer the programs to tape, simply select the tape to disk transfer option on the menu and follow the instructions provided.

- 464 owners with external 3-inch drives will have no problems, but 6128 owners will need a cassette player with a REM socket. Stopping and starting the tape manually is difficult.

There may be situations where this won't be possible, though. 6128 Plus owners cannot load software from tape (unless their machine has been modified, and ordinary 6128 owners may not have (a) a reliable cassette player with a REM socket or (b) cassette loading leads.

You can, however, order a disk version of the covertape from our duplicators, Ablex. To order a disk version, snip off the coupon on the corner of this page and send it with a cheque/PO for £2.00 to Ablex Audio Video, Harcourt, Halesford 14, Telford, Shropshire TF7 4QD.

Duff tape?

We go to great lengths to make sure that our covertapes work properly. However, if you still have difficulty, try this:

- Loading at several different volume levels if you're using an external tape recorder.
- Cleaning the tape heads. This can be done with any commercially available cleaning kit.
- Adjusting the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Turn it a fraction at a time with a jewellers screwdriver. When the crispest sound is heard, the alignmnent is spot on.
- Tapping the cassette gently against a table edge – the spools may be sticking or jammed.

If you still can't get the tape to load then send the tape, along with a brief description of the problem and an SAE to:

**AA85 Covertape Returns,
Ablex Audio Video Ltd,
Harcourt, Halesford
14, Telford,
Shropshire
TF7 4QD**

Disk 85 Token

Worktop

Do you go green with envy when you see the WIMP front ends on 16-bit machines? Well now you needn't go green any more! (Unless you've go a green screen.)

Loading: *Worktop* can only be run from disk. Either transfer all the covertape programs to disk, or order a disk version from Ablex. To load Worktop, type RUN"WORKTOP"

"Cor, that's never an Amstrad, is it?"
"It certainly is, my pathetic little friend."
"But hang on, Amstrad's only have a one-line interface!"
"Until now."
"Yeah, but it looks like a proper computer now, dunnit, like the ST or Amiga!"
"The Amstrad always has been a proper computer you repulsive tick. And here's a smack round the ear to prove it." [Spotty gimp staggers off clutching ear and wailing].

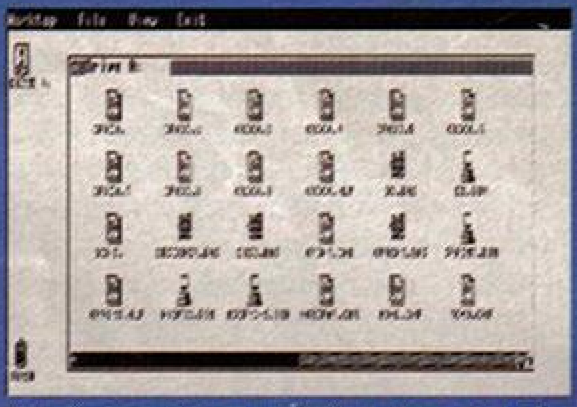
It's true, readers. There's nothing that the Amiga or ST can do that the CPC can't (in its own time, admittedly). The CPC too can display an extremely polished WIMP (Windows, Icons, Menus, Pointers) interface if you can't get on with the rather clanky Amsdos version. At least it can now.

The first WIMP front end we saw was from ace coder David Wild up in Humberside. However, *AA*'s very own techie new recruit Richard Fairhurst has polished up the principle to produce this stunning version that will have 16-bit owners goggling and drooling (they drool anyway, but the goggling bit's new).

There's no space to go into all the things it does here, partly because we've wibbled on too long and partly because it comes with its own DOC file which is over 20k long. We'd have had to write pretty small to fit that in... as it is, to read it, just load it into any old text editor.

Worktop controls
Keyboard control

Cursor keys	Move pointer
Copy key	Activate menu/option



Cor, that must be a Macintosh then. No? Oh, er, an ST? What, an Amstrad? Yes, it most certainly is.

Disk organiser

Just imagine – your agent calls you up and says "Spielberg wants you to do your screenplay, can you send another copy?" But you can't remember which disk it's on!

Loading: *Disk Organiser* is the second and last program on Side 2 of the tape. It needs to be transferred to disk to run. Then type RUN"ORGANISE".

Why did nobody ever think of it before? You just write a little program to CAT a disk and store all the filenames in a database. If you ever need to find a file again, all you have to do then is carry out a search of this database and find the name of the disk it's stored on! Only 6K of code, but stupidly useful if you've got loads of disks.



This prog CATs all your disks, prompts you for a disk name, then stores the filenames in a little database.

Pokes

Bust open those games gathering cobwebs in the attic with these clever, itsy-bitsy little code-tweaking routines...

Loading: The pokes are the last things on Side 1 of the tape and must all be run from BASIC. To load them, type RUN"(pokename)". Here's the list:

AA80.GS Infinite lives for the *Stryker and the Crypts of Trogan* demo and Anarchy on the AA80 covertape.

MULTMIX4.GS Lots of goodies for all the games in this juicy little budget compilation. Now you've got no excuse.

PUFFY.GS Ever wish you had more energy after scoffing a leg of lamb? Well now you have! (Don't worry – it makes sense if you've played *Puffy's Saga*...)

SUPERSEY.GS Mr Potatohead (i.e. Seymour) gets to live for ever (i.e. gets infinite lives) in this super game (i.e. *Super Seymour*).



Not quite super enough to beat Super Seymour? Try our handy covertape poke.

WONDER.GS By special request, a poke to give infinite lives in the tape version of *Wonderboy*.

COMBAT.PH Time running out on you in *Combat School*? This poke from yesteryear slows the timer – useful for all those gaming *old*-timers out there...

ROBOCOP.PH Another request – this one's for *Robocop*, and it stops your energy from going down. How can you run out of energy when you're a robot?

RTYPE.MW One of the all-time classic shoot-em-ups, *R-Type* was also a bit tough... until Mike Wong produced this poke. It lets you choose invulnerability, infinite credits or infinite lives. Maybe Rod can get off Level One now...

BOMB.AP The tape version of *Bombfusion* gets the Andy Price treatment here – the first four levels are redefined, and you get infinite lives.

FRANK.AP Another requested poke, this time for *Frankenstein Junior*. It takes out all the ghosts, which makes life a bit easier!

3.5" Mega Drive £79.95

(Including FREE MS800 and 10 free disks)

FEATURES

- ★ 800K per disk when used with MS800 (supplied FREE), RAMDOS, ROMDOS, or RODOS.
- ★ DUAL MODE: Mode 1.—The Mega Drive is a complete alternative B drive. Mode 2.—The Mega Drive will also format up to 800K per disk
- ★ SIDE SWITCH switches the disk between side A and side B of your 3.5" disk.
- ★ EXTERNAL PSU. the power supply is external, and should the need ever arise is easily replaceable.
- ★ MULTI-COMPATIBLE The Mega Drive is compatible with almost all other computers, so that if you change computers you can transfer your MegaDrive. Only a different lead and connector required.
- ★ COMPACT SIZE The Mega Drive measures only 7" x 4" x 1".
- ★ RELIABLE The Mega Drive uses the most reliable TEAC mechanism, and assures you of trouble free operation. Full 12 month RTB guarantee.

G.V.L. Microform (Dept AA10)
191 Watling Street Road, Fulwood, Preston PR2 4AE
Phone 0772- 701248 Fax 0772 703131

FD1 Disk Drive £79.95

Overseas Orders Welcome

MS800 - the STANDARD in 800K storage £9.95

MS800 enables the Dual - Mode disk drive to store up to 800K per disk. Since it was introduced in 1991 it has become the biggest selling software of its kind, by far. So much so that many people have converted their earlier 3.5" and 5.25" drives to dual mode capability, and switched to MS800.

FEATURES INCLUDE;-
360K, 400K, or 2 x 180K per side. Compatible with all CPC's and CPC+'s CP/M+, MF11, Stop Press; and all other software. 64 or 128 directory entries; verify disk; disk copy; file and batch copy. Unlike most alternatives each disk initialises the computer for its own format without using up any of the storage space. Once a disk has been formatted, MS800 itself is not needed.

Formatting up to 400K each side needs a SIDE SWITCH on the drive. We can supply a side switch and simple fitting instructions, suitable for 3.5" or 5.25" disk drives
Side Switch with instructions £3.00

SPECIAL OFFER
50 X 3.5" Disks & Disk Box
!!! £29.95 !!!

MP3 TV Tuner £29.95
CT1 Clock/Radio/Alarm £14.95
MP3 & CT1 ....£39.95
6128 ROM £24.95

MAXIDOS (with FREE PROCOPY)—£13.95

THE MOST COMPREHENSIVE & EFFECTIVE GENERAL DISK UTILITY AVAILABLE FOR THE CPC

MAXIDOS is fully compatible with RAMDOS, AMSDOS, and CPM formats.
COPY files/disks; VERIFY disks; RESURRECT erased files;FAST FORMAT Amsdos/Ramdos/Romdos; IDENTIFY format; CAT files (including erased ones) optional status/address/length/etc; ALTER user areas; MAKE/UNMAKE system or read only; DISPLAY or PRINT files ...and MUCH MORE. BEST sector editor EVER for the CPC. All standard editing facilities, PLUS file mapping to screen or printer, auto step by step movement through a file, string and byte. SEARCH through file/disk. FILE ARCHIVER backs up disks to tape; variable baud rates. SPEED up your disks! Unique optimise, re-arranges your crowded disks, making them load up to 50% faster.

Trade Enquiries Welcome

BONZO SUPER MEDDLER..........£13.95
now includes the BONZO HACKPACK - FREE! The most comprehensive tape to disk utility. Supplied on disk with a huge database of verified transfers. Produces stand alone transfers.

BONZO BLITZ..............................£13.95
now includes BONZO'S DOODAH and 4 adventure games - FREE! Tape to disk transfers. Deals with all forms of SPEEDLOCK. Works on all CPC's and produces stand alone transfers. Huge database of verified transfers.

BONZO BIGBATCH........................£9.95
FAST, FLEXIBLE database. Superb football pools predictor, plus a user friendly memory saving SCREEN & SPRITE DESIGNER.

BONZO FLASHPACK £9.95
"The best all round BASIC extension program" WACCI. FLASH BASIC adds around 70 extremely useful RSX's to use in BASIC programs. The resulting progs will run on any computer without the presence of FLASH BASIC. Includes a database and other excellent example programs.

ABBA Switch (6128/664)....£12.95

3rd drive switch (6128/664).........................£12.95
(Including fitting instructions)

FILE TRANSFERS
CPC To/From PC's, PCW's and Others
2 in 1......£24.95 MFU.......£29.95
(Both programs run in CPM+ NOT CPM 2.2)

464/464+ OWNERS
Want a DISK DRIVE? Cannot find a DDI-1?

Exchange your 464 for 6128 ....£129.95
Exchange your 464+ for 6128+ £99.95
It's cheaper than buying a DDI-1, Rampack, & ROM

OTHER ITEMS

3.5" Disks (Mitsubishi Branded) (10) £7.95
3.5" Disks (Ex Software House) (10)......................£5.95
3" Disks (Amsoft) (10).......................................£19.95
3" CF2 Disks (Branded Bulk) (10).........................£15.95
Plastic Cases for CF2 3" Disks (10)......................£5.95
3.5" Disk Box (Holds 50).....................................£7.95
3"/3.5" Disk Drive Head Cleaner...........................£4.95
Printer Lead..£7.95
64K DKtronics RAM PACK £39.95
6128+/464+ Adapter £9.95

MICROFORM GVL

Phone your order before 3.00pm for same day dispatch

All prices include VAT, postage & insurance for U.K. & BFPO.
Overseas orders charged at the cost of airmail postage. Trade enquiries welcome.

CREDIT CARD ORDERS
(24 HR SERVICE)

Phone 0772 701248

Reaction



ROD LAWTON opens all the readers' letters this month, as Adam works on producing a hit single for this month's music feature (heaven help us!). Send your letters to: Reaction, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW...

Not a sissy...

How about putting the adventure *Conman the Barbaric* on the covertape? I mean, if *Your Sinclair* can do it, surely *AA* can too?

And yes, I know what you're thinking even as you read this: "look at the colour of the paper he uses, what a sissy, eh?"

I am not a sissy, never was and never will be. I'm Irish and this was the only paper I could find at the time so now you're well and truly sickened! Ha ha ha ha haaaa...

Damien Kirwan
Logatrina

Quite frankly, Damien, what's good enough for Your Sinclair isn't necessarily good enough for us...

Anyway, we didn't think you were a sissy at all. And for your information, we were sickened right from the start (the colour of the paper, you see). Oh, and for any readers wondering what colour it is, it's a sort of cross between banana custard and tartare sauce. Yuk.

Some lead, others follow

You may recall that a short time ago I won the £25 voucher in the "Crap Poem of the Month" competition in Reaction.

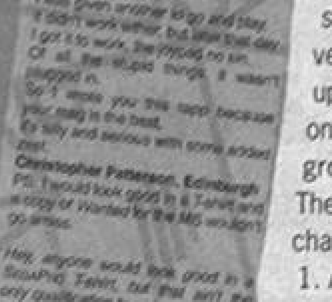
Apart from owning an Amstrad I also own a Sega Mega Drive, and last week I was flicking through the pages of *Sega Pro*, when what did I find?

An exact replica of my poem, apart from a few words which had been changed from 'Amstrad' to 'Sega'.

Please print this letter so that if the person responsible (mentioning no names) is reading he will know what a cheat and copying little beggar he really is!

Tom Ash
Bingley

No, we won't mention Christopher Patterson of Edinburgh's name, either, or that he reckons he would look good in a Sega Pro T-shirt (according to his letter).



Sega fans are too thick to write their own poems!

Sounds like fun...

I read with great interest the letter from Mr. Bradley in *AA83* and – with even greater interest – your answer.

I am quite new to the computer scene and what you said that we shouldn't do in your answer sounded like fun. How does one "interfere" with code? And what's "hacking" and how do I do it? And will I get paid if you print this? Must do it more often.

P.S. Great magazine, great tapes – thank you for both – and I didn't pinch this paper out of my school exercise book. I'm too old for that – I pinched it out of my son's.

Pauline
Sittingbourne

Pauline, you're the second person this month to seem sensitive about their notepaper. Quite rightly too, in this case. You know you really shouldn't steal from your children.

And neither should you harbour any thoughts of learning to hack. Yes, it may sound like fun, but many things in life that are 'fun' are also illegal...

No, you're not going to get any money, no matter how many times you write.

Well done!

I am writing to say "well done" for producing such a brilliant magazine. All together now... 3, 2, 1... "well done!" There is such a lot in *AA*: reviews, cheats, PD, an adventure column, tips, letters (like this one), words, sentences, paper, ink... the list never ends (*my impression exactly – ed*), does it? I find *AA* very humorous and enjoyable. Keep it up (please) because I'm sure everyone would like to see it prosper and grow (or is it grow and prosper?) These are my favourite *AA* staff charts:

1. Adam Peters
2. Rod Lawton
3. Er... are there any more?

Joseph 'Raving Nutter' Taylor
Sheffield

Yes, there are load more, actually: Lam Tang (art editor), Tracy O'Donnell (production controller), Jackie Garford (ad manager), Colin Campbell (publisher) and loads of other peeps who help get the mag together, month after month.

By the way, despite such effusive and no doubt heartfelt praise, you're not going to win a bean. I reckon your letter was a cynical ploy to try to win a tenner. Besides, you put Adam at the top of your chart and not me...

Are Speccy games better?

I think your magazine is ace and I love your covertapes – keep up the good work.

My friend has got a Speccy and gets Speccy mags (*Your Sinclair*), but his tapes have got much better games on (which we play on all the time). These games are: *Chaos, Feud, Crackout, Software House, Five on a Treasure Island, Ant Attack, Rebel, Samurai, Chubby Gristle, Defenders of the Earth* and *Rampage*.

Simon Box
Doncaster



We've already given you FAMOUS FIVE on the covertape – what more do you want?

Oi, Simon, don't you study your AA properly? We've already given you Five on a Treasure Island and Defenders of the Earth! As for the rest, half of them have never come out on the Amstrad, and the other half are no great shakes as games.

Type-ins backlash

As a regular subscriber to *Amstrad Action*, I wish to formally complain and protest about the August 1992 issue in respect of pages 51, 52, 53 and 54 – *Type-Ins* and the BASIC Tutorial series.

These pages were simply a repeat of the same pages printed in the July 1992 issue and therefore the August 1992 issue is of a lesser value for money.

To correct matters, are you:

a) Going to issue a supplement of the four pages to cover the content presumably intended for the August issue, or

b) Going to double up the content in the September 1992 issue to 8 pages covering two lots of *Type-Ins* and two parts of the tutorial series without any deductions of other pages?

Simply to apologise and continue on will not be quite good enough, I'm afraid, you owe us 4 missing pages!

D. Webb
Doncaster

I'm afraid apologising and carrying on is all we can do. The way magazines are printed and bound means it is quite impossible to simply add four pages to an issue at will. Besides, the four pages are not missing. You will find them in subsequent issue. Admittedly, four pages in the August issue were 'wasted' – we can't do anything about that now – but you won't miss any of the BASIC tutorial, or any of the type-ins we were going to publish...

...But look, hang on a minute. You've got every right to be annoyed about the Type-Ins section being repeated, but I think you're taking us to task a bit too vigorously. Believe it or not, we do try very hard indeed to produce the best magazine we possibly can for CPC owners. We could just sit back, work 9 to 5 and turn out a dull, reliable product. We don't think that's good enough, though, so we make a considerable effort, every month, to produce the best CPC mag you can buy. Occasionally, mistakes are made – this was one of them.

We don't think editorial quality and content is easy to quantify simply as 'numbers of pages'. OK, this time four pages were 'wasted' – but a whole magazine filled with easy-to-write, easy-to-produce, easy-to-forget features would be a waste of an entire magazine, not just one section.

Type-Ins backlash 2

You lot want to get your act together. I was very annoyed to find that the *Type-Ins* for *AA83* are the same as *AA82*. Do you lot check the mag before you release it? If you do, please open your eyes. Thanks. And does it mean that two copies of the covertape type-ins will be the same?

Duncan Hawkes (we think)
Stockton-on-Tees

Now then, Duncan, how many issues ofAmstrad Action have there been? 84 – correct. And how many of them have contained repeated pages? Let's count through, shall we... one! Yes, Duncan, we do check the pages. We checked these pages. However they subsequently had to be reprinted due to a slight imperfection, and the wrong file was printed. Next time we'll check pages as the leave the building (and maybe as they arrive at the printers, and maybe once the presses are set up, and maybe as the pages emerge...). It was a freak mishap, Duncan, and we're as annoyed as you are.

No, there won't be duplicated type-ins on the covertape. This issue we're replacing them with an extra program.

Don't go to Warrington...

I have four things to point out:

1. I think *AA* is fab, but I'm afraid it's my painful duty to inform you of a plot so dastardly that you'll want to flush your head down the loo. A plot so treacherous that anyone with a nervous disposition should stop reading now. A plot so disloyal... (am I boring you yet?) (*long ago – ed*)

It all began a few months ago when my friend (who shall be called Mr. X for legal reasons) was contemplating purchasing a Nintendo Game Boy (hold on a minute while I just go and wash my mouth out with soap and water). However, I managed to persuade him not to, and to use his money to buy the greatest mag for the CPC. Unfortunately, the newsagent didn't have *ACU* in stock, so he plumped for *AA* instead (only joking!). (*That was it, was it? The thing 35,000 readers and I were waiting for? You useless gimp! – ed*)

2. I wish to complain about *Reaction* (*what, the pitiful standard of some of the letters? – ed*). The only reason that readers write in is to get their grubby hands on a £25 voucher. Why can't you give away £10 vouchers instead? Then more readers would get a voucher.

Incidentally, I would be delighted, nay, honoured, if you would present me with the very last £25 voucher.

3. I know you shouldn't mock the afflicted, but another friend, Biddy, has a Commodore 128 (sorry, rude word!) ha ha!

4. Could you also tell Mr. X to shave off his silly moustache? (It looks like a slug!) Keep up the good work.

Kerrill Grealy
Warrington

1. What a load of old nonsense. You should be on Marti Caine's crap joke show.

2. Consider yourself neither delighted nor honoured. Er, that means you stand as much chance of winning £25 as crossing the channel on a bicycle. And no, don't try it...

3. Pitiful old relic. (The machine, that is – I've never met Biddy.) The only machine in the world with a disk drive slower than tape loading.

4. You must have some funny slugs round your way.

P.S. I don't think jokes about moustaches are funny. They're almost as non-funny as jokes about beards.



Someone from Warrington. If anyone ever suggests you go there, don't listen. You might bump into Kerril Grealy...

Rude and insulting

I find it extraordinary that you could allow a member of your team to be so rude and insulting to one of your paying customers by branding him an idiot for expressing a point of view on the presence of bad language in a particular program listing.

Are you so sure of your circulation figures that you can approve, not only Adam Peters' rather hysterical and flawed defence of bad language in his reply to Mr. Bradley but of his plan to hold an Idiot Correspondent of the year competition? Not, I would have thought, an ideal way to encourage correspondence from your readers. Nor, I suspect, will it do much to persuade more mature readers like myself to continue subscribing to your magazine.

In my view, the use of bad language in most contexts indicates lack of maturity, low intelligence or limited vocabulary and I would ask Master Peters to seriously consider who is the real idiot here.

If he regards this letter as another candidate for his childish competition I shall be proud to stand alongside Mr. Bradley.

Robert Wallace
Cheltenham

In retrospect it was unkind to call Mr. Bradley an idiot. We won't be having an 'Idiot Correspondent' competition. I few people have made similar remarks to yours, and we are bound to take note of them.

Beyond that, I side with Adam entirely. Have you read – properly – Mr. Bradley's letter and Adam's reply? Mr. Bradley objects to the use of the phrase 'don't give a damn'. That's up to him. I really can't bring myself to be remotely outraged by it in any context – certainly not in a computer game.

I am outraged, however, by what he does next. He hacks into the game code using a special programming utility and objects to what he finds there, despite the fact that the language used will never be visible on-screen if the program is used as the publishers intended – as a computer game. If you type rude words into the hi-score table, you'll get rude words back. Simple as that.

Mr Bradley's objection is tantamount to someone climbing a step-ladder to look over a neighbour's fence and then objecting on the grounds of public decency when they discover they sunbathe in the nude! Frankly, what programmers put in the depths of their code is nobody's business but their own.

The comparison with BASIC listings is absurd. Listings are designed to be examined and understood as easily as possible. Commercial games are designed with quite the opposite in mind! The programmers go to some lengths to stop the public examining the code at all.

However, they can't be entirely prevented from doing so, as Mr. Bradley demonstrates.

Finally, Mr. Wallace, I'm glad you consider yourself more 'mature'. Nevertheless, it seems to me you've just spent most of your letter doing to Adam what Adam did to Mr Bradley.

Amscene

Are you the best games player in the country?

More news on the National Computer Games Championships being held at the Future Entertainment Show! The finals will be held on three different machines – the Nintendo SNES, the Sega Mega Drive and the Amiga. What, no Amstrads? Nope, but that doesn't matter. No-one's going to have an advantage because they're going to have to play on all three!

The games being played in the final will be *Zool* on the Amiga, *Aquatics* on the Mega Drive and *Robocop 3* on the SNES.

Although the finals are being held at the show, there will be regional heats throughout the country on the following dates:

12th, 13th, 14th, 15th October
Glasgow Union Street Megastore
Falkirk Games Centre
East Kilbride Games Centre

19th, 20th, 21st, 22nd October
Stockport Game Centre
Manchester Megastore

26th, 27th, 28th, 29th October
Bromley Game Centre
Croydon Game Centre
Guildford Game Centre
Ilford Game Centre
Kingston Game Centre
London Game Centre, 100 Oxford Street
Birmingham Megastore
Bristol Game Centre
Cardiff Megastore
Newcastle Megastore
Gateshead Game Centre

Regional finals will be held on the Friday of each week in a local Megastore, and the winners of the regional finals will go to the grand final in Earls Court on November 7th and 8th.

Just to recap on those fabulous prizes, it's £10,000 for the winner and £4,000 for the runner up – and all national finalists get an Amiga, SNES and MegaDrive plus games! And all you have to do to enter is turn up at one of the stores in the list above on the dates given.

The competition is being run in conjuction with *Bad Influence!*, Yorkshire TV's forthcoming computer games show, and Virgin Retail.

The Future Entertainment Show

AA sells more copies!

Amstrad Action has just been notified of its new ABC (Audit Bureau of Circulations) figures, and the official news is that with a figure of 35,298 it's selling more than last year!

Of course, this is a bit confusing if you're looking at the last issue and reading the figure '37,120' in the contents page. But to get a true comparison of sales you have to bear in mind that the year is split into two halves. The figure for the July-December period is always higher than that for the January-June period, so to get a true idea of how you're doing, you have to look at your sales for the same period last year.

The bottom line is that in the first half of this year our circulation was 35,298 people, while in the first half of 1991 it was 35,159. OK, it's not a big jump. The amazing thing, though, is that it should go up at all – the CPC (and *Amstrad Action*) is alive and kicking!



The only way is up! Amstrad Action's sales are higher still than last year's.

More ROM for your money

Brunning Software is adding a new, low-cost ROM module to its line-up (see the special review last month). The new ROM will sell for just £46, but has all the features of *Brunword 6128* – plus, of course, all the speed and memory advantages of its ROM installation. The ROM includes KDS ROMDOS and Brunning's revolutionary As You Type spellchecker. What's more, our spies tell us that, lurking within the new ROM, are the Brunword *Elite* printing system and the *Infoscript* relational database. These are present, but not 'enabled' – but we wouldn't be too surprised if an 'upgrade kit' appeared soon...

Scull PD label printer

Alan Scully has produced a new label design program to compete with Goldmark Systems' *LabelMaker*. Scull's *Label-Design* supports 3-inch, 3.5-inch and 5.25-inch label sizes and is being sold for only £2.50 (plus 3-inch disk and stamped SAE). You get 21 different fonts to choose from and you can also import clip-art. And since *Label-Design* saves labels in standard 17K format, it's compatible with most CPC art packages.

For more information, write to: **Alan Scully, 119 Laurel Drive, East Kilbride, Glasgow G75 9JG.**

Cheap 6128 tape loading upgrade

If you've got a 6128 Plus you're probably fed up at not being able to load tape software – including the *AA* covertape!

Up until now, the only solution has been to send your machine off to be 'converted'. Well reader Chris Johnson has sussed out how to do the modification (which is very easy if you can handle a soldering iron) and is offering a diagram and full instructions for the price of just £5! The materials you need come to less than £5, so you can do the whole job for a tenner. Be warned, though – there's no facility for a REM socket, so you'll still have to stop and start the tape player manually.

He also has a tip for Plus owners who've had their machines converted and are still having trouble saving covertape programs to disk. He reckons that if you select the 'Transfer to Disk' option as usual, *then rewind the cassette back to the start of Side 1 before continuing*, it will work!

If you want DIY instructions for the conversion, send £5 and an SAE to: **C Johnson, 55 Carisbrooke Close, Langney, Eastbourne, East Sussex BN23 8EQ.**

Want to convert your 6128 Plus to load from tape? Chris Johnson shows how it can be done for £10...



BrunWord

Elite ROM Module £125

This is the ultimate addition to a 6128 computer. Word processor, spelling checker, 33,000 word dictionary, relational database, 9 pin print enhancer, 24 pin 'type setting' routines and 10 superb fonts, all programmed into one high capacity ROM (256K bytes). Massive memory, small size and includes our latest innovations, the As You Type spelling checker and our System 2 simplified printer control.

We fit the ROM into a small ROM board and give it a thick coat of protective resin, making a neat module which plugs directly onto the expansion socket of the CPC6128 or 6128 Plus. The price includes our 8 bit printer status port.

Great Power

Plug on the module, switch on, type |BW and the whole system is immediately ready for use. Type into the word processor, if the computer beeps, press <f3> and ask for help, transfer the correct spelling and resume typing. Use the database to print labels, search for an address, transfer it to the word processor and print it out, all without a single disc operation to slow you down.

Exciting Features

The Elite ROM has a host of exciting features including 5 high quality high speed screen dumps for 9 pin and 24 pin printers. These are special routines using the 8 bit printer status port and they print incredibly fast compared to desk top publishers. Every dot of ink on this page, including the drawing, the large 'BrunWord', our name & address, credit card symbols and Teddy, was printed in one operation using the BrunWord Elite ROM module and an Epson LQ1070 printer (wide carriage LQ570).

For simple layouts, System 2 can be set to Auto-formatting which enables micro spaced printing to be used without any layout instructions even when using proportional fonts.

Any Printer ?

All ROM modules work with any Epson compatible printer. All 24 pin printers can make full use of BrunWord Elite. Older designs of 9 pin printers (Amstrad DMP2160 etc) are limited to whole space justification but modern 9 pin printers (Star LC10 etc) can use micro justification.

Free ROMDOS

If you have a second 3.5 inch disc drive then you need KDS ROMDOS. We can supply this programmed into your ROM at no extra cost. (Not 6128 Plus). BrunWord ROM solves the frustration of disc drive confusion by always using whichever drive has the disc in it. Using a 3.5 inch disc drive with BrunWord ROM is simplicity itself and the ROM manual now covers our 'undocumented' command which enables a 3.5 inch disc to import and export text to a PC.

Remember.... No ROM box is needed.

BrunWord 6128 £30

Complete word processing package (disc) with word processor, spelling checker, 30,000 word dictionary and card filing programme. Type RUN "BRUNWORD" to load the word processor, spelling checker and the dictionary. BrunWord 6128 out performs all other word processors for the 6128. A fast screen response, extensive editor commands and the 4000 words per minute spelling checker, make it a joy to use. On the disc is a tutor file which takes even a complete beginner straight into word processing and demonstrates the powerful editing and formatting features of BrunWord. The 40 page manual includes step by step instructions to produce and print a simple letter.

6128 ROM Module £46

The same as BrunWord 6128, without the card filing programme, but supplied as a ROM module, with free ROMDOS (not Plus) and our fabulous As You Type spelling checker. (6128 Plus - add £12). Don't forget.... no ROM box to buy!

Info-Script ROM £79

The Info-Script ROM module is a complete data processing package, including all the features of the 6128 ROM. Even with 1000 names and addresses loaded into memory for instant reference, you can type a 10 page document in the word processor and your spelling will still be checked while you are typing. Stop anytime, use the database to search for a reference (typically taking 1 second for the search) and return to your typing. You could, if you wish, leave a marker in your text and transfer the data. Each programme remains just as you left it, with instant access. Can be upgraded to the full Elite ROM.

Comparisons

We have tested BrunWord 6128 and Protext with the same file of 3366 words.

The first test was to compare the scrolling speed of the screen, using line by line scrolling. This is a vital performance test as the CPC6128 tends to be naturally slow at this task. BrunWord scrolled 40% faster than Protext.

Protext was the fastest to justify but used a simple process that added spaces at the centre of each line, giving the middle of the text a bulging appearance. It did not display as it went along and so needed a separate operation to see the result. BrunWord displayed as it justified and produced a balanced appearance.

Our simulated typing test achieved 218 words per minute. Both BrunWord and Protext had no trouble at this speed.

The spelling test checked all 3366 words. BrunSpell took 52 seconds and needed no disc changes. Prospell took 6 min 24 sec and needed 8 disc changes.

The find and replace in Protext is confused by words starting with a capital letter so it always requires two separate operations. BrunWord is more sophisticated and automatically handles both variations in one operation.

Quotes

"It's totally brilliant...... carries on the extreme user friendliness of Brunning Products to a very high standard..... I have one of these little gems plugged into the back of my CPC right now..... The BrunWord ROM has performed in an exemplary fashion on all fronts."
Chris Knight (ACU Editor) - ACU August 1991.

"....(BrunWord) in itself is quite uncomplicated and easy to use. That's the beauty of the system - you can just sit down and start typing..... the fastest most efficient spell checker anywhere..... Info-Script is a formidable piece of software engineering. The fact that it's instantly available from BrunWord makes you realise just how powerful this whole package is..... The BrunWord ROM is a truly excellent product."
Rod Lawton (AA Editor) - AA September 1992

"Two weeks ago today I received my copy of BrunWord 6128 and would like to say how delighted I am with it. Although I am a qualified touch typist, I expected to take ages to get used to my first professional word processor and could not believe that only after a few short hours, I was using BrunWord as if I had had it for years, it is so well thought out and user friendly. I often have very difficult documents to type, lots of centring, underlining, indentations and numbered paragraphs. Four days after receiving BrunWord I typed eleven letters, an agenda and a set of complicated minutes in just two evenings."
Miss Veronica Petter (Bristol) 20th Aug 1992.



'The Gun Girl'
Delightful line drawing by Chris Rothero, Dart Scanned by agreement.

Send cheque/PO/Access, Visa, Connect number to:-

Brunning Software

138 The Street,
Little Clacton, Essex, CO16 9LS.
Telephone (0255) 862308

BrunWord 6128 with BrunSpell (on 3in disc). . £30.00
BrunWord 6128 ROM Module with BrunSpell. . . . £46.00
464 ROM Module, BrunSpell & disc connector. . £59.00
Info-Script ROM Module, BrunWord & BrunSpell. £79.00
Elite ROM Module, BrunSpell & Info-script. . £125.00

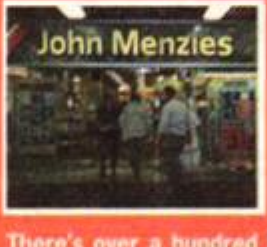
****** You must state 'Ordinary' or 'Plus' ******
464 ROM cannot be supplied with Plus connector

All prices are inclusive for UK. Overseas orders sent insured air mail - Europe add £2.50 : Rest add £7.50

Shopwatch:

BRISTOL & BATH

There are still plenty of places around that sell CPC games, if you know where to look. Every month Shopwatch will list the software stores in a different town or city that have large stocks of CPC software. This month: our locals.



JOHN MENZIES, Southgate Shopping Centre, Southgate, Bath
Our nearest software shop has a massive stock of budget games. There's over a hundred CPC games on the EDOS electronic duplication system, plus an extra three shelves of Amstrad budgies. Totally excellent.
FULL-PRICERS 2 BUDGETS 204



THE GAME STORE, Galleries Shopping Centre, Union Street, Bristol
A very big stock in a very new shop. CPC games are on two shelves right at the back of the shop. As well as loads of games, The Game Store also sells packages from the Fun School education series, plus other pieces of educational software. Oh, and they sell the CPC Azimuth Tape Head Aligning Kit too!
FULL-PRICERS 19 BUDGETS 81



TOYS 'R' US, Cribbs Causeway, Junction 17, the M5, Bristol
Toys 'R' Us stock lots of games, but all of them are from Ocean! There are recent full-pricers (*Addams Family*, *Smash TV*, etc), half a dozen compilations, and a large selection of games from Ocean's budget re-release house, Hit Squad.
FULL-PRICERS 9 BUDGETS 59F

Action Zone

talk hard

It's the latest instalment in our new series where YOU, the readers, get to ask people in the 'biz' tricky questions (write to TALK HARD at the usual address). This month, it's our mate Spotty in the hot seat...



ADAM PETERS (fat person)

"How do you produce those big screen shots with labels? None of the screens are that big." Matthew Travis, Maidstone

Aha, those are done using *Studio 8*, my favourite computer program in the whole world. We 'grab' loads of screens from the game using our CPC-to-Apple Mac grabbing system, and we can then cut and paste the screens on the Mac system. All we do is cut the screens out one at a time and place them in position on a large 'canvas' (work area), fitting the different pieces together like a jigsaw. So the large screen shots are actually loads of small screens stuck together, that's why the hero sprite appears on the 'maps' (or whatever) loads of times, because it's in each of the screens that we put together to make the big pic.

You can do loads of other wonderful things with the program, such as moving sprites around. If you want to make your performance in the game look more impressive, you can use the cut and paste facility to increase your score or your energy level or whatever. How about moving your sprite so it looks like you're killing the baddie that's trying to kill you? It's all so easy. Er... but of course I would never 'doctor' the pics like that. Oh no, not me. It just isn't ethically right, and besides I'm such a brilliant games player that I don't need to do anything like that anyhow. Ahem.

"Why are you so nasty in your letter replies?" Sarah Howells, Devon

Nasty? Me? What do you mean, Sarah? I'm only nasty to pompous oafs; people who write in to complain about swearing they encountered when hacking into a covertape program, or people writing in to say that our magazine is crap, ordering us to cut out all the games coverage (if people really hate the magazine that much, maybe they shouldn't be buying it?).

Oh yes, and I'm nasty to people who are nasty



Phil Howard (AA's Cheat

● Full name (including embarrassing middle names)
Philadelphia Howard (bet you thought it was Philip!). I have a middle name that begins with F but there are only two people in the entire world unfortunate enough to be stuck with it, that's me and my cousin Bill. If Billy's not tellin' then neither am I! (Address withheld.)

● Printable nicknames
My kids call me dad, my wife calls me duck, and my dog calls me woof.

● Favourite game
I have an penchant for wild boar... In the computer field however, *Space Harrier*, *Gryzor* and *XOR* were excellent.

● Favourite place in the world
Somewhere south of here, the sun is shining on a pool. By the pool there is a table and a deck chair. On the table is a cold bottle of fizzy plonk. Who cares where it is?

● Who should be prime minister, and why?
My big sister Kathryn, then I could flog intimate stories of her childhood (like the day she got stuck up a pear tree – snigger) to the Sundays for vast amounts of cash.

● Who would you most like to throw a wet sponge at?
How about Alan Sugar for being such an efficient business man that he ditched the CPC as soon as it stopped being a best seller.

● Favourite cheat
I did a really great cheat for *XOR* (AA33), but no-one has ever seen the game! See if you can get hold of it for the covertape, Rod.

to other people; all those idiots who write in threatening violence against earlier correspondents, just because they disagree with what the other person said. And I'm sometimes nasty to people who talk nonsense. But apart from that... Oh yeah, I'm also nasty to people who consider themselves the voice of authority. And people who can't spell. And people from the Midlands. But apart from that, I'm nice to everyone. So get lost Sarah, you twerp.

Readers' broom cupboards

Blimey, are we talking cutting edge here or what? Welcome to the start of an exciting new series of spotlights on readers' cupboards-under-the-stairs. First up is one Michael Tanguy from Athis-Mons in sunny France, whose broom cupboard is featured here. Michael tries to pass it off as his 'computer room', but we know a broom cupboard when we see one (and we're looking at one right now). Michael says he spends most of his spare time sitting in the cupboard. I know only too well what that's like Mike, but at least you've got a computer in there. I only had a piece of chalk in mine, which I used to mark off the passing days.



Readers, we'd like to see your broom cupboards. Are they as fab as Michael's? Maybe you've got a nuclear processing plant or a family of ostriches in yours. Take a look, take a pic and send it to us. Mike's won himself £10 in frog money for this piccie. Would you like the same (only not in frog money)? Send your pictures to *Readers' Broom Cupboards* at the usual address.

Happy birthday to us

It's our party and we'll cry if we want to. Crying's for girls though, so we'll put on silly hats and behave like loonies instead. We're seven, you see. Not us personally, you understand: the magazine, we mean. It's *AA*'s seventh birthday this month. Blimey. It seems like only twelve months ago that we were celebrating our sixth birthday. Doesn't time fly when you're putting together Britain's most action-packed CPC read?

We thought we'd have a big party to celebrate and planned to invite along some of the *AA* oldies (most of whom still work for Future Publishing). Then we realised that anyone who came along would want a slice of cake. All we could afford was a tiny cake in the shape of a caterpillar, and we wanted all of that for ourselves.

For that reason the three of us held a secret party when everyone else had gone home, noshed up on choccy cake, threw some streamers, put on some silly hats, and toasted seven years of serving the CPC community. Settle back as we list some of the facts and figures from the first seven years of *Amstrad Action's glorious and groovy* history...

The highest scores

Lemmings (97%)
Spindizzy (96%)
Driller (96%)
Smash TV (96%)
Turrican 2 (95%)
Prince of Persia (95%)
Doomdark's Revenge (95%)
Highway Encounter (95%)



The party's in full swing, and everyone's getting into the spirit. The look on Rod's face is a worry though (he's got the cake!).

The lowest scores

World Cup Carnival (0%)
Santa's Xmas Capers (6%)
Pit-Fighter (11%)
Fruit Machine Simulator (15%)
5-a-side Soccer (17%)
Plasmatron (17%)
Nuclear Heist (19%)

The total so far

Letters: 8,683
Game reviews: 1,738
Techie pages: 1,421
Covertapes: 31
Issue 35s: 2
Karting days out: 1

Where are they now?

Bob Wade: Downstairs
Steve Carey: Next door
Pat McDonald: *Amiga Format*
Richard Montiero: Bournemouth
Trenton Webb: *The pub*
James Leach: *The pub*
Adam Waring: God knows

We couldn't have come this far without you, you lovely readers you. So bake *yourself* a lovely, scrummy cake and celebrate with us. Don't forget to send us a piece though. Oh yes, and we'd like some beer too. (And some jelly would be nice.)

Send all birthday cards and presents to the usual address. Here's to the next seven...



We managed to prise the cake, if not the expression, off Rod. But now Lam's nabbed it! Adam's a bit, er, tired and emotional.

ODE guru)

● How many roads must a man walk down?
OK Adam... what does this mean...? If it's about music, I'm a Pogues fan, if it's about TV then I like *The Munroe Show*, if it's about politics then I vote for the person with the silliest name (usually Liberal), otherwise the answer is blowin' in the wind.

● The most exciting thing about living in Mapperley is...
Apart from that it's where Cyril Smith learnt to hang-glide, there's a place you can get videos for 50p a night. (The best one lately is *The Hard Way* – and I thought it would be rubbish).

● How would you react if Freddy Krugger (Nightmare on Elm Street) knocked on your door late at night and asked to borrow a cup of coffee?
I would be absolutely horrified... I always thought he drank tea.

● If you needed extra fuel for a bonfire, which CPC games would you use?
I really dislike football games (in fact I really dislike football). So let's not wait: burn all the Emlyn Hughes', Gazza Lineker's and Brian Clough's international world cup super soccer fortune champion manager games, here and now!

● If you had a pet wildebeest, what would you call it?
We have a dog called "the dog", a bird balled "the bird", a rabbit called "the rabbit", a guinea pig called "the guinea pig", and a goldfish called "the fish". If we had a wildebeest I would call it Doreen.

● Most embarrassing incident
Some time ago (about when the picture was taken), I managed to be sick all down my future father-in-law's back. There are just no words at all for moments like these.

● Favourite thing about the CPC
It's the best, but the last, of the hobbyist machines – no average lorry driver will ever learn so much about computers again!

● Have you ever seen a ghost?
No, and I don't really expect to (Sun and Moon in Capricorn!). I liked the film version though.

● Would you ever take your Multiface with you on holiday?
No. Call me old fashioned, but a Multiface's place is in the home.

Photo: Phil Howard mellowing out, circa 1972. (Dressing like this was quite normal back then, Phil assures us.)

Next month: Ask Alex host Alex van Damm reveals all in Private & Confidential

Action Zone

COMMENT The industry that killed itself

CPC software is out-selling PC and Super NES software combined...so why are many software houses ignoring the machine?

Fancy paying £50 for a game you could get for £3.99 on your CPC? Then step right up...

The CPC is feeling the pinch. WH Smith and Boots both dropped the format early in the year, and the past few months has seen the supply of full-price games drying up, though there are quite a few planned for Christmas release. What is the truth about the CPC market? Why are the softies and shops cutting back on the machine? *AA* reveals all:

"We do tend to kill off a format of our own volition" MATTHEW TIMMS, DOMARK

Last summer 55 CPC games were released and the machine was responsible for 6.8% of the the total computer games market. This summer it's 32 games and a 4.2% market share. Do the maths and you'll see that sales of individual games have actually risen!

Whilst the reduced choice may be party responsible for this rise (less games to choose from means you're more likely to buy a certain game), it's clear that the big software houses have 'ditched' the machine far too early. As Matthew Tims of Domark admitted – when questioned over his company's decision to stop producing games for the ST – "we do tend to kill off formats of our own volition."

So is the CPC dying? Of course not. The market itself is perfectly healthy, it's just the lack of games and the reduced number of stockists that is causing the problem. CPC software is, according to official industry figures, currently out-selling PC software and Super NES software combined, despite being so difficult to get hold of. But do the softies care? *Amstrad Action*'s circulation has risen from what it was last year, flying in the face of a supposed 'decline' in the market. But do the softies care? Of those Amstrad owners that do buy Sega and Nintendo machines, the majority are hanging on to their CPCs too, because you can get games for £4 rather than £40, and you can do lots of non-games things impossible on a keyboardless console. But do the softies care?

No. What they care about – understandably really, in these recessionary times – is money, and there's far more of that to be made from the console market. For a start, cartridges are impossible (or at least very hard) to pirate. Then there's the fact that they seem to be able to get away with charging what they like for the games. *Streetfighter II* on the Super NES, yours for only £70 (official UK release)! Kind of gives the lie to that old software industry claim that games are so expensive because of piracy, doesn't it, when an un-piratable product pops up at the seventy quid mark? Sega and Nintendo cartridges cost about £6 to manufacture, incidentally, a mere £5 more than the cost of producing a game on two 3.5" disks.



There's a lot less money in a market where people have grown used to not paying more than ten or fifteen quid for a game (the lower the price, the lower the profit mark-up), and many wait for games to appear on the £4 re-release shelves anyway. There are other problems with producing CPC games now, not least the fact that many decent Z80 programmers are moving from the CPC and Spectrum to the Gameboy – it uses the same chip, and the pay is better!

All home computers are under attack. Lots of big softies (Palace, Storm, Domark, Audiogenic) have stopped producing games for the Commodore 64; Domark and Mindscape recently announced they were not going to produce any more games for the ST; Anco, the people behind the *Kick Off* games, have just announced their withdrawal from the Amiga market.

It's widely accepted that within three years all home computers will have effectively 'died out'. Why? Mainly just because the big companies are keen to build upon and inflate the consoles fad to create a piracy-free mass-profit games market.

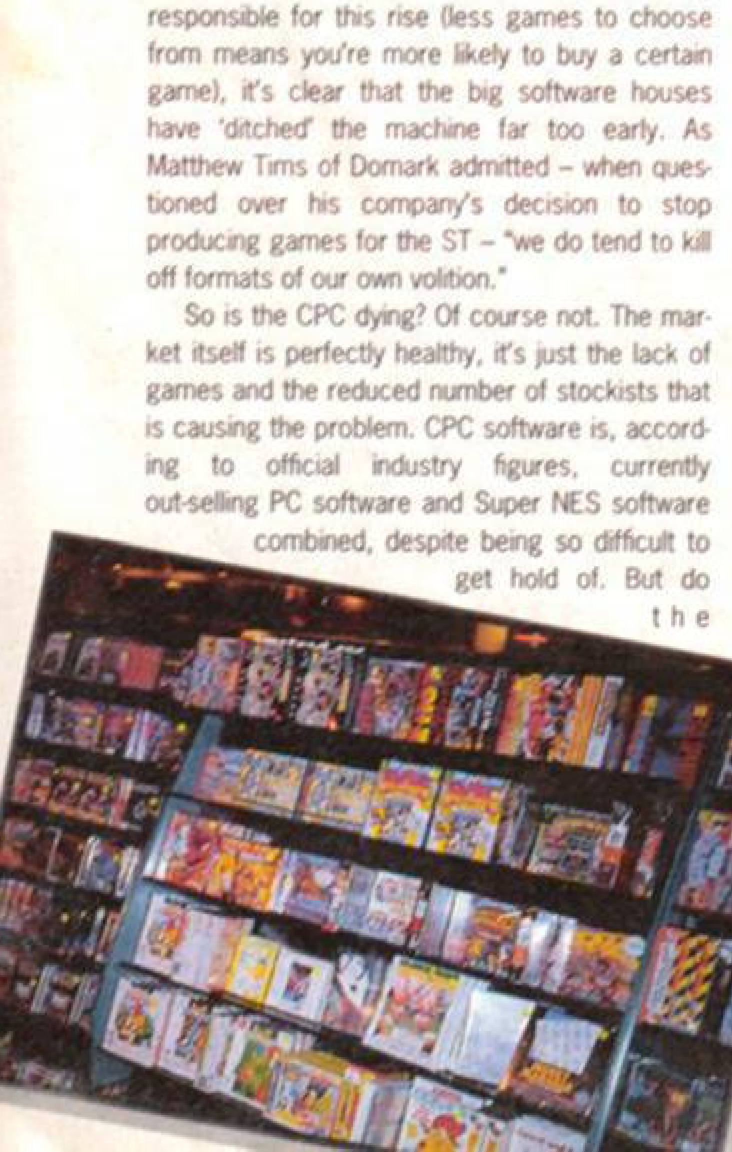
But what of the future? The softies are keen to try and create a PC games market, since the PC is the only machine likely to survive the purge. (They can't kill off PCs as the machines are so well established in business use, and it's PCs that are used to program games for other machines, including Sega and Nintendo consoles.)

While adults might buy and use PCs, how many youngsters (who form the majority of the gaming population) can afford a PC or the games for it (which are just as expensive as console games)? A half decent PC for games use (with sound card) would set you back about £1,000!

And here's the really grim bit: Virtually all the current programmers (across the formats) first got into programming through messing around with the computers they owned as youngsters; things like the CPC, Spectrum or BBC. What of the next generation of programmers? The kids that grow up today, knowing only consoles, have no opportunity to play around with simple BASIC and machine code.

So where are the programmers of the future going to come from? If they don't show, where will the games of the future come from? Will computer games go down in history as the industry that killed itself? And do the softies care?

Maybe they soon will



Shelves packed with CPC games, but the Virgin Megastore in Oxford Street is a rare oasis in Mario and Sonic Britain.

EARLY RELEASE

Nigel Mansell's World Championship

Good old Nigel. What a fine world champion he is, yes indeedy, him and his car. I guess Gremlin bods are rubbing their hands in a particularly gleeful manner over Nige's success, as it's surely bumped up potential sales of this game no end.

Nigel Mansell's World Championship sets you at the wheel of Mansell's famous Williams car as you race through the 1992 Grand Prix season, tackling loads of circuits, racing loads of other drivers and loads of other cars. (Presumably the same number of cars as there are drivers.)

There is a whole range of skill levels ("from wheel cleaner to world beater"), a neat learner track, and full world championship points system.

Of course, what makes the Amstrad version of *Nigel Mansell's WC* even more of a game to get excited about is the fact that it was YOU, dear readers, that made it happen. Gremlin were set to pull out of the CPC market. They came to *AA* and asked us to find out how many of our readers wanted a CPC version of the game. Hundreds wrote in to say "yeah, we want it".

Gremlin were overwhelmed by the response, realised the Amstrad market was very much alive and kicking, and the game hits your local software shops in a couple of month's time. Hurrah!

Software house: Gremlin
Release date: December 1992
Price: £10.99 cassette, £15.99 disk
First impressions: Gremlin are old hands at the drive-em-up genre, and *NMWC* looks like being of the same high class we have come to expect from the Sheffield softie.

AMIGA SCREENSHOT



This should give you an idea of what Nigel Mansell's like. Like a racing game, basically.

AMIGA SCREENSHOT



And there's tunnels in it. CPC screenshots in Action Zone the moment we get them...

EARLY RELEASE

Crazy Cars III

"Burn up the highways of the USA at the wheel of your Lamborghini Diablo in the Crazy world of illegal Saturday Night Races." OK...

(Three weeks later...)

Crikey, those Americans and their illegal Saturday night races! There were loads of different routes and you had to try and ram your opponents off the road! Then there were the roadworks you had to avoid! And the cops, of course! Everyone was betting on the outcome of the races, to try and earn money to enter more races and buy fancy attachments for the car!

There were four divisions of racers and you could fit your car with radar detectors, night vision, and all sorts of hi-tech stuff. It was wild, man, and very, very dangerous. I survived but my Lamborghini is much the worse for wear, with a couple of bits missing and a couple of extra bits (pieces of mountain embedded in the roof).

Er, actually it's not my Lamborghini at all, it's our publisher Colin's. I kind of, er, borrowed it. Better go and tell him...

(Thirty minutes later...)

Erm, *Crazy Cars III* from Titus is out in a couple of months. Tell your Spectrum and C64 owning friends how fab it's going to be. Then tell them that it's only coming out on Amiga, ST, PC and Amstrad CPC. Ho ho!

And remember, don't try the things you do in computer games in real life, it's not good. Right, excuse me for a while. Six hundred, he said:

I must not drive other people's cars without permission,

I must not drive other people's cars without permission...



The first Amstrad screenshot to wing its way across the channel looks something like this. A road with cars on it. Hmm...

Software house: Titus
Release date: November 1992
Price: £10.99 cassette, £15.99 disk
First impressions: *Crazy Cars II* was a massive improvement on *Crazy Cars*. If *Crazy Cars III* follows the same pattern, it could be a real smasheroonie.

HERE COMES THE RUSH

Here's our monthly round-up of all the new games (budget and full-price) in the pipeline and details of when to expect them...

September

POPEYE 3
Alternative • £3.99
A boxing game, where Popeye takes on monsters in a ring surrounded by cheering mis-shapen blobs.

SOOTY & SWEEP 2
Alternative • £3.99
Creeky Castle is the setting for this burglar-bashing platformy collect-em-up.

THOMAS THE TANK ENGINE 2
Alternative • £3.99
For younger viewers, *TTTE2* puts you at the wheel of the famous choo-choo in a kind of puzzle game.

WILD WEST SEYMOUR
CodeMasters • £3.99
The second arcade adventure starring everybody's favourite lardball. See page 28 for the latest details.

October

BULLY'S SPORTING DARTS
Alternative • £3.99
Bullseye fans ahoy! There's no questions to be answered here, just lots of darts to be thrown.

POSTMAN PAT 3
Alternative • £3.99
Delivery Dan's lost the keys to his van, so Pat must spend ages delivering the Yellow Pages. Ahem.

RECKLESS RUFUS
Alternative • £3.99
A mazey shoot-em-up with a very original line in movement (involving numbered blocks).

ROBIN HOOD: LEGEND QUEST
CodeMasters • £3.99
A platform game based on everybody's fave semi-mythical medieval lord-turned-outlaw called Robin.

SLICKS
CodeMasters • £3.99
Based on the NES game *Micro Machines*, and reminiscent of *Supercars*. Should be a scorcher.

SUPER ALL-STARS
CodeMasters • £12.99
Turbo the Tortoise, Magicland Dizzy, Capt Dynamo plus newies *Steg the Slug* and *CJ in the USA*.

November

CRAZY CARS 3 (Titus • £10.99/£15.99)
CRYSTAL KINGDOM DIZZY (CodeMasters • £9.99)
FOOTBALL MANAGER 3 (Addictive • £10.99/£15.99)
SUPER SPORTS CHALLENGE (CodeMasters • £12.99)
SUPER STAR SEYMOUR (CodeMasters • £12.99)

December

ALVIN & THE CHIPMUNKS (Alternative • £3.99)
DOCTOR WHO 'DALEK ATTACK' (Admiral • £6.99)
NIGEL MANSELL'S WORLD CHAMPIONSHIP (Gremlin • £10.99/£15.99)
STREETFIGHTER 2 (US Gold • £10.99/£15.99)

Only £29.95

Sub
Amstra

Free Software
when you subscribe (or resubscribe!)

Free Delivery
of your favourite magazine, every month

Free Club
All subscribers automatically get a monthly Subs Club newsletter

PLUS you get complete INFLATION PROTECTION for a year AND you GUARANTEE never missing a copy of Amstrad Action!

Free when you subscri
any one of these three



Fun School 3

Database Software's excellent educational programs can now be yours FREE when you subscribe to AA. Choose from one of three packages: under-5s, 5-7s or over-7s.

• Cassette only

or



Les Stars

A compilation of four great arcade games from top French software house Loriciel. Includes Builderland, Skweek, Super Skweek and Bumpy.

• Cassette only

o

Yes! Please enter/renew my subscription to Amstrad Action at the all inclusive price of *tick as appropriate*

12 ISSUES ☐ UK £29.95. ☐ EUROPE £47.25 ☐ REST OF WORLD £63.10

To ensure you receive your magazine and tape quickly and undamaged, all overseas subscriptions are sent Air Mail

MY CHOICE OF GIFT IS *TICK YOUR CHOICE* **FUN SCHOOL 3** under-5s ☐ 5-7s ☐ over-7s ☐ **LES STARS** ☐ **CHEETAH BUG** ☐

If you are an existing subscriber please quote your subscription reference number here – you will find this on your address label ____________

MY METHOD OF PAYMENT IS *TICK YOUR CHOICE* **TOTAL PAYMENT £** ____________

☐ VISA ☐ ACCESS CARD NO ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ EXPS ☐☐☐☐ ☐ CHEQUE *Make payable to Future Publishing Ltd*

NAME ____________ SIGNATURE ____________

ADDRESS ____________

____________ POST CODE ____________

Enclose this coupon (together with your cheque if applicable) in an envelope and send to: AMSTRAD ACTION SUBSCRIPTIONS, FREEPOST, SOMERTON, TA11 7BR.

NB: YOUR SUBSCRIPTION WILL BE PROCESSED IMMEDIATELY BUT PLEASE ALLOW 28 DAYS FOR THE DELIVERY OF YOUR GOODS. THIS COUPON IS VALID UNTIL 31ST OCTOBER 1992 AA/MAG/1092

scribe to l Action!

– choose ackages...



Cheetah Bug

One of the best joysticks we've ever used! Short, responsive 'stick, positive Fire buttons and a superbly 'ergonomic' design make it the office favourite... and it can be yours with an AA sub!

Complete the coupon and return it today. Alternatively, call our Credit Card Hotline on 0458 74011

YOUR NO-QUIBBLE, NO-RISK GUARANTEE

You can cancel your subscription at any time in the future and we will refund you in full for all unmailed issues.

You just can't lose out!

– the magazine that brings you ALL THIS!

• A superb covertape

Packed with software including complete games, demos of new releases, serious utilities, readers programs and game cheats

• Top game reviews

We don't just give you an opinion, we give you FACTS – plus maps, annotated diagrams, tips and more info than you'll get anywhere else

• Budget games latest

Many top games are now being re-released at budget prices. We make sure you don't miss any of them!

• Game cheats

Stuck in a game? Every month we print pages of tips, hints, help, cheats, passwords, maps and solutions sent in by our readers

• The latest news

New products, game previews, industry interviews, reader opinions and show news

• Technical help

Pages and pages of help, tips and info for those who want to do more than just play games... PLUS full reviews of all the latest serious products

• Top features

On music, desktop publishing, games, art and more – all the background you need to getting the very best from your CPC

• BASIC programming

Learn how to use your machine's built-in programming system to write your own programs AND see what our readers can do in our four-page Type-Ins section

...and there's much, much more!

IF YOU'VE GOT A CPC OR A PLUS, GET AMSTRAD ACTION!

Techie Forum

Another five pages of technical stuff for you this month, with a PowerPage tutorial, a review of MicroDesign and more. Write to: TECHNICAL FORUM, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW.

COVERTAPE PROBLEM

? I am having considerable problems with two programs from recent cover-tapes. First of all PowerPage, which I have transferred to disk as directed. I type RUN"DISC and after selecting from the menu, all I can get is the message "Drive A: disc missing". I have even sent to Ablex for a copy of the cover-tape on disc and the result is the same.

Secondly GPaint on the May covertape. I cannot get the program to print on my LC 20. When I select the appropriate icon and choose either normal or reverse printing, the screen goes red and the number 47619 appears in the top left-hand corner. I'm getting desperate: please help.

Philip Powell
Bolton

! *No problem! First of all, PowerPage: this program speeds up the disk drive so that loading takes less time. About 10% of drives can't cope with this speed, and it sounds like yours is one of them. Simply press "S" on the orange title screen to keep the disk drive at its normal speed. GPaint is less easily solved: red faces all round, I'm afraid, because somewhere in the process the printing routine got corrupted causing it to crash spectacularly. To make amends, the corrected files are on this months covertape.*

AN EDITOR WRITES

? I have written to you on 10 previous occasions and none of my letters have been published: however this letter is of extreme importance as its outcome may well mean the life or death of a fanzine-to-be, Impact. I have heard that a DTP package can take about half an hour to print out one full A4 page. As I'm not able to get access to a photocopier or a printing press, it means that I will have to print out all the pages, so I would like to know if this is true.

Andrew T.
Stoke-on-Trent

! *Sorry, it's quite true. The exact time varies according to how much blank space there is on your page and how your printer operates, but 30 minutes is a fair estimate. To be honest, printing out every single page on your printer is a crazy idea: you'll wear out expensive ribbons like there's no tomorrow, and if you're unlucky your printer head could give out (costing up to £80 to repair). Do the sensible thing: go down to your newsagents and buy a copy of Exchange & Mart, which has plenty of adverts for cheap mail-order photocopying services. You know it makes sense.*

...AND ANOTHER ONE

? I'm hoping you will answer my questions because I am trying to start a disk fanzine.

1. Is there any way to use drawings done on Advanced Art Studio in BASIC?

2. Which PD library should I write to for SuperSonic, the music program?

3. Is there any shorter way to make text files than having to use the PRINT command all the time?

I will send you a copy of the first issue of my disk fanzine when it's finished.

Patrick Morrissey
Ireland

! *It's good to see that AA's fanzine series is encouraging people to start their own fanzines! Anyway, the answers:*

1. Uncompressed pictures can be loaded by LOAD "filename",&C000. You'll have to set the inks up yourself.

2. SuperSonic was on AA's August covertape (issue 83). If you don't have a copy, order a back issue for £2.50.

3. Well, to create a text file the best way is to use a word-processor which can create ASCII files (Protext is your best bet). You can then view it from a BASIC program as follows:

```
1000 OPENIN"filename"
1010 WHILE NOT EOF
1020 LINE INPUT #9,a$
1030 PRINT a$
1040 WEND: CLOSEIN
```

You might want to put in extra lines to pause if a key is pressed, etc.

EXPANSION QUESTIONS

? 1. My 664 uses BASIC 1.1 so does it contain the 6128's 40025 chip? If it does, then why doesn't CP/M Plus run on my machine?

2. How many peripherals can I have hanging off the back of my CPC? I'm thinking of buying a 3.5" disc drive, ROM-box and Multiface 2.

3. Do Stop Press and X-Press use all three of the AMX mouse's buttons, as my present mouse only seems to use its left button?

4. Is there any way from BASIC of accessing the extra 64k of the memory pack without using the supplied bank switching software?

5. Finally, how do you load compressed Art Studio files in BASIC or machine code?

Eddie Ballinger
Dunfermline

! *1. The 664 ROM is slightly different to the 40025. There are two things tripping CP/M Plus up: one is a slight difference in the keyboard scanning routines, and another is the fact that the first thing CP/M Plus does is check for a 6128 ROM. If anything else is found, an error message is displayed. However, your dk'Tronics memory expansion manual contains details on how to adapt CP/M Plus (pages 3-23 to 3-25).*

2. Your above shopping list will work quite happily on your 664 - my own 664 setup includes all the above and works perfectly well.

3. Stop Press uses all three mouse buttons.

4. Not easily. If you enter MEMORY &3FFF, then you can switch in any of the extra four banks of 16k into the memory range between &4000 and &7FFF by OUT &7F00,&C4 (for the first bank), OUT &7F00,&C5 (for the second), etc. OUT &7F00,&C0 restores the normal setup. But if you want to do anything except PEEK and POKE, you'll have to use the supplied software.

TOP TIPS

TYPE RIGHTER

If anyone else has bought Protype for their expanded 464 and is having difficulties getting it to work, alter the following programs and then resave them to a backup of the original.

Side B: Load up the program "PROTYPE" and alter MEMORY HIMEM+ in line 170 to MEMORY HIMEM- . In lines 220 to 240, the BASIC syntax |FONT,"x","font name" is not possible and so it will have to be altered to something like: font$="x": fontname$="font name": |FONT,@font$,@fontname$

Side A (for use with Protext): Load "PCONFIG" and delete line 120. Then remove "ON BREAK CONT" from line 130.

After resaving, load the program "CONFIG.BAS". Replace line 10 with: 10 a$="DRIVER.EG":|PRINTER,@a$. When run, it should now load up the fonts and perform as specified in the manual.

Paul Pippard
Huntingdon

AA: Thanks a lot: I can personally vouch that Paul's letter was printed with Protype and looks very smart!

DISK-IT PLUS

I tried everything to transfer my AA covertapes on my 6128 Plus, and now I've solved the problem of tape/disk transfer on modified 6128 Pluses. Follow the instructions in the transfer program, but remember we Plus owners have a manual REMote switch, i.e. a finger and our ears! Press PLAY then any key to start, and when the signal stops after each block, press PAUSE on the tape deck and count to 10 between each click on the disk drive (especially with PowerPage)! Good luck, this works 100% for me.

C Johnson
Eastbourne

CALL GIRL

Some interesting CALLs for your readers:

CALL &BB00: gets rid of function key definitions.
CALL &BC6E: starts the tape motor relay.
CALL &BC71: stops it again.
CALL &BCA7: shuts the sound chip up.
CALL &BCC8: stop any machine code interrupts.

I hope these work on all CPCs (I have a 6128). Finally, this little routine resets the TIME count to 0:

```
10 FOR a=&A000 TO &A008: READ b: POKE a,b: NEXT
20 DATA &21,&00,&00,&11,&00,&00,&C3,&10,&BD
```

Rachel Lucas
Haverfordwest

PARLEZ-VOUS FRANCAIS?

I have a French penpal who doesn't understand English. I prefer to send my letters to him as little BASIC programs but, until a few days ago, I was stumped as to how to print letters with accents on. As I've solved it I thought I'd share the solution for anyone with the same problem. Type this ➡

5. Compressed Art Studio files aren't intended to be used from your own programs. However, should you want to save space, this month's covertape includes a screen squeezer (SQ23) which does the job excellently.

FATMAN RETURNS

? Being a considerable Amstrad user (*!!! - Richard*) I wish to upgrade my 464 Plus with a disk drive and 64k RAM expansion. I have already got a Multiface and was wondering if it is possible to attach the disk drive and expansion to the back of my Multiface, therefore not having to detach it to use them. I would also like to know why, when I select one of the control codes on Protext (e.g. large) and then go to print on my Star LC-20, it comes out as normal print.

Simon Biggs
Hampshire

The Plus owners are really out in force this month, aren't they? Both the disk drive and 64k RAM expansion will fit on the back of your Multiface (with the disk drive at the back). However, you don't actually need to fork out £50 for a RAM expansion: I understand that R&C Systems Design (081 552 8900) are hoping to offer an internal upgrade service for 464 Plus owners. (Incidentally, the reason I recommend R&C is because they've always undertaken any repairs I've thrown their way quickly, cheaply and professionally. If you've had good experiences with other companies, drop AA a line!)

As far as Protext goes, have you set up the control codes properly? You should use the SETPRINT command to assign a letter to each code, then you can use them in your document by pressing CTRL-X followed by the letter. Make sure to save the printer driver and reload it whenever you want to print (using the PRINTER command).

THIS COMPUTER IS DEAD

? We have had a fault on our 464 Plus (*not another Plus! - Richard*) after 7 months of correct functioning. The computer hums when switched on, and when F1 is pressed the computer functions correctly for a few moments and then red H's appear. Is this a virus or is it easily correctable? If so, how?

P Brown
Luton

! *No! No! No! Please, everyone out there in reader-land, stop blaming things on viruses. The only (benign) virus ever known on the CPC floated around the German cracking scene a few years ago and is now virtually extinct. In general, viruses are pieces of code unique to 16-bit machines which corrupt your discs. They don't cause physical damage to your computer, and are pretty much unknown on 8-bits such as the CPC. The actual danger of such*



Ask Alex...

Only me! ALEX VAN DAMM here again with that section of TECHIE FORUM set aside for questions from people who are still just getting to grips with computing. Confused by hex? Lost in BASIC? Then I'm here waiting to hear from you. Send your beginners' queries to: ASK ALEX, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW. Rest asssured, I'll do my very best to try and help you...

TWENTY QUESTIONS

Patrick Donaghey of County Derry is intrigued by a few of the products he's seen mentioned in AA.

? "I would like to know something about a Multiface 2. Also 3.5 inch disk drives and what they are capable of. What do ROM and ROMDOS mean? What is a "6 socket" and what does it do? Adam Peters is a real wally and needs his head examined (*too right - Alex*). Can you get educational software or word processors on the 3.5 inch drive if I was to buy one for my Amstrad 6128 Plus? Would any 3.5 inch drive work if it was attached to my computer, or is a 5.25 inch drive better, and why? Please try and answer all the questions, the mag is great."

! *Phew! I don't think I've ever had so many questions to answer! Anyway, here goes... a Multiface 2 is a copying device that lets you put tape games onto disk. It won't be so much use to you, because as a 6128 Plus owner all your games*

infections has been enormously overhyped by the national press.

So, if it's not a virus, what is it? It sounds like something is either wrong with the actual cartridge (in which case, checking to see if the machine works with another cartridge plugged in is a good idea) or with the computer itself. If you still have a guarantee, take it back to the shop you bought it from and ask for a replacement. Otherwise, it's off to the repairmen for you - again, try R&C on (081) 552 8900.

DISK DOCTOR

? I am trying to load sectors directly from a disk, but am not having much luck. A CPC-owning colleague says that there are firmware routines available to do this: however, they are not listed in my 464 firmware guide (SOFT 158). Is this true, and if so, how are they used?

Dr. Jacob Adams
London

! The AMSDOS ROM contains a number of routines designed for purposes such as this. They are all in the form of RSXs, with the single-character names CTRL-A to CTRL-I. If you can find a copy of SOFT 968 (the complete CPC range firmware guide) or SOFT 158A (the disk drive firmware guide) they'll help you, but here's a sample assembler routine to load track 36, sector &C5 from a disk into &4000:

```
    ld hl,command
    call &BCD4          ;KL FIND COMMAND
    ld (addr),hl        ;store address of routine
    ld a,c
    ld (romno),a        ;store ROM number of routine
    ld hl,&4000         ;address to read sector into
    ld e,0              ;drive A (1 for B)
    ld d,36    ;track 36
    ld c,&C5            ;sector &C5
    rst 3               ;jump to routine
    addr: defw 0   ;inline parameter for address
    romno:defb 0   ;inline parameter for ROM number
    ret                 ;return from routine
    command:db 4+&80;CTRL-D plus &80 (last letter)
```

If the sector was read without problems, carry is true and A is zero. However, if a disc error cropped up, carry is false, A contains an error number and HL contains the address of an "error status buffer". All other registers are preserved, except the flags. The routine can be adapted to write a sector to disc simply by using the command CTRL-E (so the last line would become "db 5+&80").

are on disk, but for 464 owners who upgrade to disk it lets them load their original games more quickly. Romantic Robot, the makers, are selling off their last stocks now so you'll have to hurry if you want one!

Sorry Patrick, but the software companies don't sell their programs on 3.5 inch disk because all CPC owners with disk drives have a 3 inch drive, while only a few of those have 3.5 inch drives too - so it's not worth the bother for you. A few PD libraries can copy their software onto 3.5 inch disks for you, though. 5.25 inch drives were quite popular a few years ago, but now that 3.5 inch is more of a standard on expensive (over-priced) computers like STs and Amigas, the effect has trickled down to us Amstrad users and 5.25 inch drives are quite rare. It's probably better to go for a 3.5 inch drive, then: any drive advertised for the CPC will work with your Plus as long as you tell the company what computer you have.

A ROM is a silicon chip which contains a program, usually a serious one like a word-processor or programming language. They don't hold much (only 16k), but the best thing about them is that the program is ready to go as soon as you switch on - no more waiting for it to load! To be able to fit ROMs to your computer, you need a ROM board which plugs into the back of the machine. What you've seen advertised is a "six socket ROM-board" which lets you plug in six ROMs. (Some let you plug in eight, but for most users this isn't much use as the computer will have reserved the extra two for the disk system and BASIC anyway). Finally, ROMDOS is one of the programs you can get on ROM. It lets you use a 3.5 inch disk drive to its full potential, with each disk holding a massive 800k. Really good, except there are loads of programs in persuading programs to co-operate with its extra facilities.

MORE DISK DRIVES!

Pauline Smith is a 464 Plus owner wanting to upgrade.

? "I bought a 464 Plus last year - I got it originally for the kids to use but I found they couldn't be bothered waiting for it to load, so I thought that maybe I could add a disk drive. I am told that I need a DDI-1 interface, that it must be modified, and that I need a "widget". What I know about the working of a computer you could fit on the back of a stamp and also have room for the complete works of Shakespeare, so I hope you can help!"

! *It is confusing, isn't it Pauline? There are two problems with fitting a disk drive to the 464 Plus (which, as you've heard, must be a DDI-1 model: other disk drives don't have the interface you need), one being that the connectors on the Plus are different (which is why you need a "widget" or adaptor), the other that it needs a few alterations to work on your Plus. What I'd suggest is that you buy a DDI-1 interface and drive from somewhere (try the AA Small Ads, they're cheaper than buying new), then 'phone around the Plus specialists for a few quotes on adapting it. It's quite a simple operation, so if you get charged over ten quid you're being ripped off! Three numbers to try: R&C Systems Design (081 552 8900), WAVE (0229 870000), and Dartsma (081 317 1170 evenings). Good luck, and let me know how you get on!*

command:

KEY 0,CHR$(160): KEY 1,CHR$(161): KEY 2,CHR$(162)

Then, whenever you want to add an accent into a line to be printed, insert this sequence: the letter, CTRL-V, CTRL-A, CTRL-H, the accent, CTRL-V, and CTRL-B. For the accent, press SHIFT and \ (backslash) for a grave accent, f0 for a circumflex, f1 for an acute accent and f2 should you need an umlaut (good for those with German penpals!).

Alex Williamson
Portsmouth

SUBLIMINAL MESSAGES?

Users of Arnor's excellent Maxam 1.5 will find a secret message concealed within their ROM. Type |QWXCL and all will be revealed: shame they never got around to writing the promised features!

Dave Brooks
Hexham

AA: A quick look at some other ROMs suggests that users of the original Amstrad serial interface could try typing |ROMCAT,&FFFF. Anyone else discovered any fun hidden features?

IN AND OUT

I have a 6128 Plus which has been modified to accept tape loading. One problem I encountered is that the new BASIC doesn't seem to support the commands I had on my old 6128, |TAPE.IN, |TAPE.OUT, |DISC.IN and |DISC.OUT. After a short session with my assembler I came up with the following solution. Type in and run the following listing:

```
10 FOR i=&AF00 TO &AF14: READ a$
20 POKE i,VAL("&"+a$): NEXT
30 DATA DD,4E,00,DD,46,01,DD,5E,02
40 DATA DD,56,03,DD,6E,04,DD,66,05
50 DATA ED,B0,C9
```

This routine is a simple memory copy program, accessed by CALL &AF00, location to copy to, location to copy from, number of bytes. To use it for the missing commands, you need to set up the Plus for tape or disk operation, copy the right part of the jumpblock to a safe place in memory, change the file system being used and then copy the original jumpblock back. A bit complicated, but easy when you get the hang of it. The INPUT jumpblock consists of 21 bytes from &BC77, and 3 from &BC9B. The OUTPUT jumpblock consists of 15 bytes from &BC8C. As an example, this will emulate |TAPE.OUT:

```
|TAPE
CALL &AF00,&AF15,&BC8C,15
|DISC
CALL &AF00,&BC8C,&AF15,15
```

Edmond Sprucer
Heckmondwike, W. Yorks

AA: Good to see people getting to grips with the Plus machines! Edmond's routine is actually useful for all CPC owners as a memory copier. For example, to copy the screen to &6000, type CALL &AF00,&6000,&C000,&4000 and CALL &AF00,&C000,&6000,&4000 to get it back again.

COVERTAPES

We got quite a few letters about our covertapes this month. And here they all are...

LOADING FROM DISK

? I must admit I'm a bit of a computer dunce – I've only had my Amstrad a few weeks – but I've managed to load the *AA* covertapes fine up until now using my son's cassette recorder plugged into my CPC6128. Just last week, though, I tried transferring the programs on one of my old tapes to disk. Everything seemed to work fine... except that I can't get anything to load from the disk! I've tried RUN"DISC", RUN"DISK" and even ICPM (a tip I picked up from an old magazine) but nothing seems to work. What's gone wrong?

Rachel Priddy
Gloucester

! **Nothing's gone wrong, Rachel, it's just that software is loaded quite differently from disk! For a start, most of the programs on the tape are loaded from the menu screen, which is what you need to load first. Now on the menu is the first thing on the tape, and when you type RUN" (or CTRL+ENTER) when loading from tape, the computer runs the first program it comes to – the menu. Files are stored differently on disk, though – there's no start and finish to a disk, so you can't get the computer to load the 'first' thing it finds, can you? What you have to do is type RUN"MENU". This will bring up the menu screen, and you'll be able to choose the program you want!**

MISSING FILES

? I've got a 6128 and although I don't mind loading the covertapes from tape, I prefer disks. The trouble is, I've tried using the tape-to-disk transfer routine on the tape and, while many of the files transfer properly, some don't. I've tried it again and again and the same thing keeps happening. There can't be anything wrong with my equipment, can there, or nothing would transfer at all?

Raymond Pierce
Solihull

! **From what you say, Raymond, it sounds to me as if you're using a tape recorder without a REM socket. To transfer software reliably, your 6128 needs to be able to switch the cassette motor on and off when it wants to. The transfer routine works by first loading a file from tape, then saving it to disk. If the cassette motor isn't stopped while the disk transfer is happening, the tape player is half way through the next file before the CPC is ready to start loading again!**

What you need is any portable cassette ➡

MicroDesign Plus

REVIEW

128k disk only • £11.99 (enhancer only), £29.99 (with original MicroDesign) • Campursoft, 16 Slatefield St, Gallowgate, Glasgow G31 1UA

Blasts from the Past (number one in a series): remember the original MicroDesign? Although feted by some as a DTP package, its lack of features in some areas (particularly text entry) made producing any sort of serious fanzine with it a slog. Peter Campbell, an MD enthusiast, got together with programmer Jess Harpur to try and remedy some of the problems: the result was the "Plus" enhancer.

If you buy the version containing the original program, two disks are supplied. The first contains MicroDesign itself, and the second MicroDesign Plus. Installation is a simple process, only involving running the "INSTALL" program from the Plus disk and swapping disks twice. From then on, the updated program can be run by RUN"DISC".

MicroDesign itself is primarily a graphics editing program which can be set to use one of three sizes of page: upright A4, sideways A4, and the high resolution "strip" format. All the features you'd expect are there, such as fill area, draw lines, text (four sizes are available)... However, don't think that the text option is suitable for typing in an article: to move from one line to the next, the cursor must be manually repositioned. Similarly, no text formatting options (such as word-wrap, justify or centring) are offered.

The program uses the strange concept of full-size and half-size pixels. This basically means that any line, circle or whatever that you draw is twice as chunky as it need be, as MODE 1 size pixels are used. It is possible to restore them to the correct resolution by using Zoom mode, but this can be awkward due to the fact that you can't scroll the area being edited. Another major feature is "icon" operation, which allows you to load in a set of small pictures to be simply placed on the page or used as fill patterns. These are also used to create headlines (numerous fonts are supplied), and although the fonts are extremely well-designed and look impressive when placed on the screen, the lack of any automatic centring and the need to position letters individually make them quite fiddly to draw.

The filing menu is well implemented, with features new to MicroDesign Plus including user and drive change. The Plus version supports ROMDOS, MS800, BigBonzo and other extended formats, which is a huge improvement over the original for those with 3.5" drives. Another improvement, as the program disables CTRL-SHIFT-ESC, is a soft reset option. The Plus enhancer, a separate program, can be loaded from this menu. If you have a page in memory, it must be saved before accessing the new program.

Six options are available from the main menu, the two main ones being file conversion and customise. The latter of these is more easily dealt with: it lets you select a printer driver from IBM, Epson or the new user-defined option, and change the colours of the main program. Just as well, really, because the default colours are awful.

The file conversion menu has six options. These allow you to reduce or enlarge a previously saved page area, reverse the inks in such a file, and change a normal 17k binary screen file into a .DR file suitable for loading into MicroDesign (no matter which mode the original was in). A further option gives compatibility with Stop Press/PowerPage cutouts (allowing access to the huge range of PD clip art available), as well as Stop Press pages. This permits dedicated users of Stop Press to print their pages with the far superior printing facilities in MicroDesign.

The one remaining option is that to convert a text file into a .DR file: a necessity for fanzine editors. A whole host of options are available for the sizing of the .DR file(s) produced, as well as the welcome ability to have any size of text you like in any standard font. However, text formatting must be performed by your word-processor, and as for automatically flowing text around graphics or using proportional spacing: forget it.

Finally, two other programs are worth a mention. Goldmark Systems' Page Printer gives MicroDesign the unique ability to print out pages on 24-pin printers, and as such makes the two an essential combination for 24-pin owners. The other program is the forthcoming update to MicroDesign Plus itself, with even more improvements promised: upgrades will be available for a reasonable fee, so that people can feel happy buying the existing version rather than waiting for the new version.

GOOD NEWS
Superb printing facilities
User-friendly menu system
BAD NEWS
Headlines fiddly to design **VERDICT 81%**

The start of a new series spotlighting a different programming language each month.

Part 1: BASIC

Chances are, if you know a programming language, you know BASIC. The most popular language of them all has been around since the late 60s, but it only really gained prominence when Bill Gates and Paul Allen (better known as Microsoft, who now rake in millions with PC progs such as Windows 3) wrote a version for the first ever micro, the Altair. The micro explosion of the

PowerPage tutorial PART 1

Judging by the number of letters Techie Forum has received on the subject, PowerPage must be one of the most popular serious progs on the covertape ever. It's also one of the most complex, so this month we're starting a three-part tutorial on how to use the program, and in the first thrilling episode we have... graphics!

Shove the PowerPage disc in the drive, and select option 1 from the menu. After a few seconds the screen should turn white, except for a black border and menu bar at the bottom, and a cross-hair cursor in the top right-hand corner. This cursor is used to create graphics in PowerPage: for example, say you want to draw a line. Move the cursor (using cursor keys, with SHIFT to move in steps of 8) to the start of the line, and press COPY. Then move the cursor around a bit: the line follows the cursor wherever it goes. (This technique is known as rubber-banding). Pressing COPY again fixes the line in position, leaving you free to do something else.

In a similar way, ellipses (circles or ovals) and rectangles can be rubber-banded. For rectangles, use SHIFT and COPY, and for ellipses, SHIFT and TAB. When you try to draw an ellipse, the rubber-banded shape will still be a rectangle. Don't worry about this - the ellipse will appear in the confines of the rectangle just as soon as you've pressed SHIFT and TAB once more. The only other immediate keypresses you need to know are TAB (to plot a point), and CTRL and TAB (to fill an area).

Let's say you want to draw a single-line border around your page (a necessity for professional-looking DTP pages). Move to the bottom left corner of the screen, making sure that it doesn't scroll, and press COPY. Move up to the top left corner of the screen, and press COPY again. The first line is fixed in place. You can now draw similar lines on this screen to the top right, and from there to the bottom right. When these three have been drawn, draw lines on the lower parts of the page - to get at these, move to the bottom of the screen and hold down SHIFT and cursor down to cause the page to scroll down.

You might like to save this page border for future productions: this involves using the menu bar. Hold down CTRL, and use cursor left and cursor right to move the highlight block on the menu bar from "Block" to "File". Then (still holding down CTRL) press COPY. The disk drive will churn around a bit, and you will be presented with a list of options. Press S (for Save), followed by the filename you want to save the page under (e.g. BORDER). Don't press ENTER yet, but remove the PowerPage disk, insert the disk you want to save onto, and then press ENTER. After saving, you'll be prompted to re-insert the PowerPage disk. This can be reloaded in future using a similar procedure, but pressing L (for Load, funnily enough).

Once you've got the hang of the menu bar, loads more options are available to you. The Page menu lets you move quickly up and down the page, as well as being able to clear the whole lot or print the page (A5 size). Just press the initial letter of the option you want, or ENTER or RETURN to go back to the menu bar. Another menu, the Block menu, can only be selected when you have defined a rectangle (using SHIFT and COPY) but haven't fixed it yet. Instead of drawing the rectangle, Block operations are available to save the area inside it as a Stop Press-compatible clip art file (the Cut option), reverse the colours of the block, erase or black out the block, or flip it vertically or horizontally. No "Move block" function is available (there are limits to what you can fit into 64k, you know!), but an alternative way is to save a piece of clip art using the Cut option and reload from another menu - the Import menu.

This menu lets you import any standard font (such as those that come with the Advanced Art Studio) for text, which we'll deal with next time, load in a piece of clip art in .CUT format (either saved as above, or by Stop Press: there are two example pieces of clip art on the disc, LONGSHIP.CUT and FRAME.CUT), or load in a standard 17k screen file (Import Picture). Before next month's instalment, you might like to load the Quick Reference sheet supplied with the program (load EXAMPLE from the File menu), and print it out: it's an invaluable aid to experimentation!

MIND YOUR LANGUAGE

80s brought with it huge popularity as almost all machines came with a built-in version of the language, so that many young computer owners cut their programming teeth on it.

BASIC (Beginners' All-purpose Symbolic Instruction Code) is simple and easy to learn. Each line of instructions has a "line number" in front of it, with the lowest numbered line being executed first, then the second lowest, etc. Commands are in easy-ish English, so whereas you would use "writeln" to print a message on the screen from Pascal, BASIC uses "PRINT". This is not to say that good programs can't be written in BASIC, though: in fact, a recent PC version of the language (Visual BASIC, an implementation without line numbers) is recommended by Microsoft for those wanting to develop high-powered Windows applications.

CPC owners are lucky in being blessed with an excellent version of BASIC. Locomotive BASIC is fast, pretty much bug-free and offers features (such as WINDOWing) not usually found on 8-bit BASIC: it also interfaces well with machine code, which is essential for professional programs. And machine code is what we look at next month...

➡ player than has a REM socket. (These are the sockets that let you switch the tape recorder on and off from a switch on an external microphone - you must have seen them.) The cassette loading leads you use with the 6128 have a REM lead (they should have, anyway - if not, check with your supplier).

MULTI-LOAD MAYHEM!

? Why won't *Defenders of the Earth* transfer to disk? I've tried everything and it just won't work. You don't say anything about it in the magazine, either.

Danny Roberts
Cambridge

! **The boys on *Amstrad Action* have got red faced over that one, Danny. The fact is that *Defenders of the Earth* is a multi-load game. This means that the program itself is loaded first of all and it loads other files as it needs them. So, for example, when you get to the end of Level 1, the machine might have to load in Level 2. Now programmers almost invariably invent their own 'loaders' for these extra files to make them load faster. (A 'loader' simply transfers a file from tape or disk to the machine's memory.) These work fine from tape (as in this case) or disk, but never both! So while *Defenders of the Earth* worked fine from your tape, even though the files that make up the game would transfer to disk, the game still wouldn't work - the programmers' special loaders would be 'confused' by the change to disk. That's why if you want *Defenders of the Earth* on disk (and any other multi-load covertape games, for that matter), you'll have to order a special disk version from Ablex. Sorry, Danny!**

TAPES WON'T WORK!

? I always buy *Amstrad Action* every month, but I'm going to stop unless I get a tape that loads! I keep returning them to Ablex, but the replacements never work either. Come on *Amstrad Action*, get your act together!

Marc Hughes
Aberdeen

! **Well Marc, I've taken a look at the tape you sent in with your letter, and I can't find anything wrong with it - it loads fine on my 464! I've spoken to the boys on *AA* and they tell me that 95% of the tapes people send back to the office don't appear to have anything wrong with them!**

It's far more likely, Marc, that you've got a problem with your computer. One easy way to check is to see whether it loads other tape software. If it doesn't, there's your answer. If it does, try out the tips printed in tape pages before sending your tape back in despair.

● One final thing - DON'T send faulty tapes back to the *Amstrad Action* offices. They don't keep any spares there. All faulty tapes should be returned to Ablex. The address is printed both in the magazine and on the tape inlay.

Hold the front page

Part 3 of 3

You've got all your pages together: now what? In the final part of our DTP/ fanzine series, ADAM PETERS talks printing and distribution...

So how do you get your magazine duplicated? The easiest way is to get it photocopied. You might be able to get this done for free (e.g. at your own or your parent's workplace, when no-one else is around), otherwise you'll need to hunt out a commercial photocopying service, such as a local library or Prontaprint-type place.

The good thing about photocopying is that you can run off a small handful of copies at a time, so you don't need to produce any more than you know you can shift. If you're confident of being able to sell 100 or more copies, though, it will probably be better to get the magazine professionally printed.

Take a look out the price table on this page. This is an example of the cheapest printing rates you're likely to find – the higher print runs are included to show how the price per copy drops the more copies you produce. 200 is the lowest print run at this particular printers (others go lower, but most 'posh' printers wouldn't consider anything below 500).

The cheapest you can get an A4 copy (single sided) done for commercially is around 7p. A 32-page A5 magazine consists of eight A4 sheets printed on both sides (i.e. sixteen A4 sides). 16x7p=£1.12 per magazine. So 100 copies of a 32-page A5 fanzine would cost £112 to produce via photocopying. You'd then have to worry about getting hold of a long-arm stapler and spending a few hours putting all the single sheets together in magazine format.

To get 200 copies of the same magazine professionally printed, collated, folded, stapled, and delivered to your door (using Juma Printing) would cost £111.44 (£101.64 plus £9.60 for collating). So that's TWICE as many copies, looking really professional (photocopies are notoriously crap quality), and already assembled as magazines. All for a few pence LESS than the photocopying option!

A couple of warnings though: You don't want to be stuck with loads of unsold copies (and debts) on your hands, so it's probably best to get the first issue photocopied to get some idea of how many you're able to sell. And don't go to a high street printers (Prontaprint, Kall Kwik, etc) or the first printer you can find in *Yellow Pages*. An average printer would quote you two or three times the prices we've given here. There are a handful of printers around that specialise in fanzines, and these offer prices far below the norm.

Give any of these four companies a ring for their latest price list (which will also show costings for groovy extras such as coloured paper, coloured ink, glossy covers, card covers, etc):

What's the damage?

COPIES	COST	per mag	per side
200	£101.64	50.8p	3.2p
300	£113.96	37.0p	2.4p
400	£126.28	31.6p	2.0p
500	£138.60	27.7p	1.7p
1000	£205.70	20.6p	1.3p
5000	£654.50	13.0p	0.8p

These prices: Juma Printing • 0742 720915
The above prices include delivery, but not collating and stapling (which is charged at £4.90 per 100 mags, if required)



The end of the series... you should now be ready to roll!

Juma Printing (0742 720915): Cheap prices, reliable service, used by around 100 different football fanzines, and they haven't put the prices up since March last year (see table).

Agit Press (52 Call Lane, Leeds): Part of an anarchist collective that also runs a record label. Very cheap prices, though the printing can be a bit crap. Happy with low print runs.

Catford Copy Centre (081-695 0101): Also very cheap (and a bit grubby), these people are happy with print runs of almost any size, no matter how small.

Technoprint 2000 (0532 533920): A tad more expensive, unless you're doing quite a lot of copies, but the printing is of superior quality. Also offer the cheapest FULL COLOUR printing for fanzines that we know of.

Get busy

- If you're producing a fanzine on your CPC send a copy to *AA* by November 15th and we'll include you in our upcoming fanzines round-up.
- Got any queries about fanzines or DTP? Write to: Fanzines Clinic, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW.

Selling the magazine

So how do you sell your little Xerox beastie? It's not easy. The best way to sell a large number of copies is to go and stand somewhere a large number of potential buyers are likely to congregate. Some types of fanzine have more opportunities to sell like this than others.

If you're running a football fanzine, it's very easy. Football matches represent a regular gathering place of thousands of potential punters. With a music fanzine, it's also quite easy. Just go and stand outside any relevant concerts, nobbling the audience of their way in or out (or both). Computer fanzine folk have a slightly harder time of it. The only large gathering of the tribes would be a computer show. Though there are quite a few of these coming up this autumn (Gamesmaster Live, Future Entertainment Show), people that go to computer shows aren't used to being accosted by fanzine sellers in the same way that footie fans and gig-goers are? And how can you tell which machine a certain individual has got? You could end up spending all day outside the show and not selling a single copy.

Another way to sell your magazine is to persuade a relevant shop (record shop, computer games shop, etc) to sell it. They'll expect a commission though; at least 10p a copy, possibly up to as much as 50% of the cover price.

The most common, easiest and popular method of flogging a fanzine is through the post. You can't really sell a vast amount of copies through this method, but with a lot of publicity you can probably build it up to a couple of hundred.

Publicity? Well you could start by sending a copy to *AA* – we'll be doing a big round up of CPC-produced mags in a couple of month's time. Then you could try taking out classified ads in relevant high street magazines.

Doing a fanzine is hard work, and you're more likely to lose money than make it, but it's great fun. It's just as much fun putting together a magazine with 35 readers as one with 35,000. So stop thinking about it – do it!

Price Buster

READAD THIS!

Fast 7 day delivery

AMAZING OFFER
Select two or more BUDGET games and receive FREE one budget game of our choice

AMSTRAD SELLERS

AMSTRAD FULL PRICE	Cass	Disk
3D Construction Kit	£16.99	N/A
Captain Planet	New £8.99	N/A
Chart Attack	£10.50	N/A
Dizzy Cartoons	£7.50	N/A
Dizzy Collection	£7.50	N/A
Dizzy Excellent Adventures	£7.50	N/A
Double Dragon 3	New £8.99	N/A
Final Fight	£8.50	£11.50
Football Director 2	N/A	£9.99
Fun School 3 Range	£9.99	£12.99
Fun School 4 Range	£9.99	£12.99
Hudson Hawk	New £7.99	£10.99
Lineker Collection	New £7.99	N/A
Mega Hot - 8 titles	£4.50	N/A
Movie Premiere	£10.50	N/A
Ninja Collection	£7.50	N/A
Rodland	New £8.99	N/A
Shadow Dancer	£7.50	N/A
Simpsons	New £7.99	£10.50
Smash TV	£7.99	N/A
Soccer 6	£7.50	N/A
Space Crusade	New £7.50	£10.99
Super Space Invaders	£7.50	£11.99
Terminator 2	£7.99	£10.50
The ADDAMS FAMILY	**New £9.99**	**£14.99**
Too Hot to Handle	£12.99	N/A
TNT 2	£8.99	£10.99
WWF Wrestle Mania	New £8.99	£11.50

BUDGET	
3D Pool	New £3.99
Airborne Ranger	New £3.99
American Tag Team Wrestling	New £3.99
Atlantis 4 pack	New £3.99
Badlands	New £3.99
Batman - The Movie	£3.99
Bobsleigh	New £3.99
Bubble Bobble	£3.99
Bubble Dizzy	New £3.99
California Games	£3.99
Captain Dynamo	New £3.99
Castlemaster	New £3.99
Championship Golf	£3.99
Chase HQ	New £3.99
Chevy Chase	New £3.99
Crackdown	New £3.99
Cyberball	New £3.99
Dizzy down the Rapids	New £3.99
Dizzy Panic	New £3.99
Dizzy, Prince of Yolk Folk	New £3.99
Double Dragon	£2.99
Dragons of Flame	New £3.99
Dragon Spirit	New £3.99
Escape from Planet of the Robot Monsters	New £3.99
F-16 Combat Pilot	New £3.99
Fantasy World Dizzy	£3.99
First Past the Post	£3.99
Footballer Of The Year 2	New £3.99
Fruit Machine 2	£3.99
Fun School 2 Range (Available September)	New £3.99
Ghostbusters II	New £3.99
Ghouls & Ghosts	New £3.99
Go for Gold	New £3.99
Golden Axe	New £3.99
Grell & Fella	New £3.99
Gunship	New £3.99
Hard Drivin'	New £3.99
Heroes of the Lance	New £3.99
Impossamole	New £3.99
Indiana Jones + The Last Crusade	New £3.99
Jocky Wilsons Compendium	£3.99
Jimmys Soccer Manager	New £3.99
Klax	New £3.99
Last Ninja 2	New £3.99
Lotus Esprit Turbo Challenge	New £3.99
Magicland Dizzy	£3.99
Manchester United	New £3.99
Microprose Soccer	New £3.99
Midnight Resistance	New £3.99
Monty Python	New £3.99
Moonwalker	New £3.99
Multimix 1	£4.99
Multimix 2	£4.99
Multimix 3	£4.99
Multimix 4	New £4.99
Multimix 5	New £4.99
Myth	New £3.99
Narc	New £3.99
Navy Moves	New £3.99
Nightbreed	New £3.99
Operation Thunderbolt	New £3.99
Paperboy	£2.99
Pro Tennis Tour	New £3.99
Puffy's Saga	New £3.99
Puzznic	New £3.99
Quattro Fantastic	New £3.99
Quattro Fighters	New £3.99
Quattro Mega Stars	New £3.99
Quattro Skills	£3.99
Quattro Sports	£3.99
Quattro Power	£3.99
Quattro Adventure	£3.99
Quattro Coin Ops	New £3.99
Quattro Arcade	£3.99
Quattro Combat	£3.99
Quattro Firepower	£3.99
Quattro Racer	£3.99
Quattro Cartoon	£3.99
Quattro Super Hits	£3.99
Rainbow Islands	New £3.99
Red Heat	£3.99
Robocop	New £3.99
Rick Dangerous	New £3.99
Scooby Doo & Scrappy Doo	£3.99
Shadow of the Beast	New £3.99
Shadow Warriors	New £3.99
Silent Service	New £3.99
Slix (late avail)	New £3.99
Sly Spy	New £3.99
Snooker Management	£3.99
Soccer Double 2	New £3.99
Soccer Pinball	New £3.99
Soccer Rivals	New £3.99
Spy Who Loved Me	New £3.99
ST Dragon	New £3.99
Strider	New £3.99
Striker in the Crypt	New £3.99
Stun Runner	New £3.99
Stunt Car Racer	New £3.99
Super Monaco GP	New £3.99
Super Off Road	New £3.99
Super Seymour	New £3.99
Sword of the Samurai	New £3.99
The Match	New £3.99
The National	£3.99
Toobin	£3.99
Total Recall	New £3.99
Treasure Island Dizzy	New £3.99
Treble Champions	New £3.99
Turbo Outrun	New £3.99
Turbo the Tortoise	New £3.99
Turrican	New £3.99
Turrican II	New £3.99
Tusker	New £3.99
Vendetta	New £3.99
Wild West Seymour (late avail)	New £3.99
X-Out	New £3.99
Xybots	New £3.99

CALL US ON 24 HOUR CREDIT CARD HOTLINE
021 440 4108
Please state name, card number, expiry date & goods required

PRICEBUSTER ex-chart, ex-juke box singles.
One for 99p - three for £1.99 (+25p p&p)
Please tick boxes as required and forward to the address below, together with your cheque, postal order or credit card number

		Tick Box
Everything I do	Bryan Adams	❑
Beauty & the Beast	Celine Dion & Peabo Bryson	❑
I Don't Care	Shakespears Sister	❑
Thought I'd died and gone to Heaven	Bryan Adams	❑
All Right Now	Free	❑
Live your life be free	Belinda Carlisle	❑
Tears in Heaven	Eric Clapton	❑
Make it on my own	Alison Limerick	❑
When a man loves a woman	Michael Bolton	❑
Bohemian Rhapsody	Queen	❑
Let's get rocked	Def Leppard	❑
We got a love thang	Ce Ce Peniston	❑
Feel so high	Des'ree	❑
Don't let the sun go down on me	George Michael & Elton John	❑
Viva Las Vegas	ZZ Top	❑
It must be love	Madness	❑
Now that we found love	Heavy D & the Boyz	❑
Weather with you	Crowded House	❑
Hang in there Baby	Curiosity	❑
Pride (in the name of love)	Clivilles & Cole	❑
High	Cure	❑
Always the last to know	Del Amitri	❑
Change	Lisa Stansfield	❑
My Girl	The Temptations	❑
Goodnight Girl	Wet Wet Wet	❑
Deeply Dippy	Right Said Fred	❑
Hazard	Richard Marx	❑
Do it to me	Lionel Ritchie	❑
Save the best for last	Vanessa Williams	❑
Remember the time	Michael Jackson	❑
Hold on my heart	Genesis	❑
Days of Pearly Spencer	Marc Almond	❑
(I want to be) Elected	Mr Bean & Smear Campaign	❑
Always look on the bright side of life	Monty Python	❑
Do the Bartman	Simpsons	❑
Dizzy	Vic Reeves	❑
Jungle Book Medley	UK Mixmasters	❑
Sunshine on a Rainy Day	Zoe	❑

ORDER FORM AND INFORMATION. All orders sent FIRST CLASS subject to availability. Just fill in the coupon and send it to: PRICEBUSTER Unit 23, 14/20 George Street, Birmingham B12 9RG

BLOCK CAPITALS

Name: ....

Address: ....

....

....

Postcode: .... **Tel. No:** ....

Name of game	Computer	Value
	Postage	
	Total	

POSTAGE RATES: Please add 50p p&p on all orders. EEC countries add £1.00 per item. Non EEC countries add £2.50 per item. Cheques payable to: Price Buster (Sterling Only).

NEW EPROM PROGRAMMER £30.00

We now stock the FLEET programmer which can program 8k, 16k and 32k eproms at 12.5 and 21 volts. It can handle most eproms including CMOS, blowing 16k in 105 seconds! The benefit of 32k eproms is that they can contain 2 rom programs and full details of this are provided with the programmer. Also provided are the software on rom, a PD games rom file and utilities to convert Basic and machine code programs into suitable files for blowing onto rom. Instructions on how to lay out a rom are also included.

This is the best and most versatile programmer there has ever been for the CPC

BLANK EPROMS
16k and 32k new ..... 3.50 ea. or 5 for £15.00
32k used erased ....£1.00 each

32k RAMROM £13.95

32k of RAM that thinks it's two 16k ROMS. When loaded with rom programs, each 16k block behaves as a ROM program until the computer is turned off, even surviving resets. Ideal tool for writing, testing and editing rom programs without the need to blow and erase eproms. Links set the blocks to different rom slots or to the same. In the latter case the blocks can be switched between at will. As RAM, it can be used as RAM but not in the same way as the DKTronics RAM packs.

ABBA SWITCH £12.95

Swaps the internal A and the external B drives around so that the A becomes B and vice versa. Easily fitted to the 6128 (not Plus) or 664. Works with any external disk drive.

NOTE: MS800 is the only high capacity formatter that can use its disks in drive A.

MAXIDOS £13.95

The best all round disk utility available for the CPC. Includes PROCOPY (disk to disk) FREE!

3rd DRIVE SWITCH £12.95

Allows two B drives to connect to the 6128 (not Plus) or 664. Switch between them as needed even with the computer on. Allows B to B copying using different B drives. Suitable for any sizes of external drives.

PLUS TO EDGE WIDGET £8.50

50 way adapter allows the older CPC peripherals to connect to the Plus machines; Only one adapter is needed, not one for each peripheral. Not needed for our 3½" drives.

3½" DUAL-MODE DRIVE

Now only £79.95 inc. carriage. Includes MS800 disk and Rom free.
MODE 1: operates as a standard B drive storing 180k on each side of the disk.
MODE 2: stores up to 800k per disk when used with MS800, Ramdos, Romdos or Rodos.

Despite what Siren may tell you, our drives DO NOT NEED A SIDE SWITCH to store up to 800k per disk when used with Ramdos, Romdos or Rodos so do not be deceived. The fact that we include one is an extra for you. It allows MODE 1 operation (drives without the switch cannot work in MODE 1) and allows the use of the best high capacity formatter by far. See the specifications for MS800.

The drive is ultra quiet, super slim and has an off-the-desk power supply.
Please state your CPC model when ordering.
This drive is not suitable as a 464 first drive.

MISCELLANEOUS ITEMS

6128 upgrade rom with fitting instructions		£24.95
64k RAM pack		£39.95
3" disks	10 for 7.50	3 for £20.00
6' Printer cable		£8.00
ROMDOS		£19.95
Dual channel RS-232 with software		£39.95

We also stock a range of adapters to allow CPC drives to work on other computers. Please send an S.A.E. for full details of all our products.

BONZO SUPER MEDDLER £13.95

Transfers a high percentage of games from tape to disk. Produces 'stand-alone' transfers - Bonzo Super Meddler is not needed to run the transferred games. Very large database of verified transfers. Includes BONZO'S HACKPACK - FREE!

BONZO BLITZ £13.95

Transfers all known varieties of SPEEDLOCK from tape to disk. Produces "stand-alone" transfers. Large database of verified transfers. Inc BONZO'S DOODAH + 4 ADVENTURE GAMES - FREE!

BONZO'S FLASH PACK £9.95

Over 60 additions Basic. Some very powerful commands too. Can be used in your own basic programs. Produces 'stand-alone' programs - Flash pack does NOT need to be present to run the programs containing Flash commands.

BONZO'S BIG BATCH £9.95

Fast flexible DATABASE, superb FOOTBALL POOLS PREDICTOR, SCREEN and SPRITE DESIGNER

MS800 Disk or rom £9.95: both £14.95

The ONLY high capacity formatter that produces stand-alone disks. Once formatted, the disk itself carries the data to set the CPC for its use (you can send 800k disk full of proggys to your friends and they don't need MS800 to use them!) The ONLY high capacity formatter that is compatible with ALL software - it doesn't use a single byte of memory! Even programs like Stop Press and Multiface are catered for by MS800's unique 4 sided disk option. The ONLY high capacity formatter that can use its disks in drive A. (ABBA users please note). The ONLY one that works on the PLUS machines. Other features include: up to 800k per disk, choice of formats including CPM; choice of 64 or 128 directory entries; copying utility (Ramdos/Romdos doesn't have this) and a Bonzo utility that makes many transferred games run from drive B
In other words ...the best.
Existing MS800 owners can buy the rom version for £5.50.
Proof of ownership is required

AVATAR, 39 CROSSFELL ROAD, LEVERSTOCK GREEN, HEMEL HEMPSTEAD HP3 8RG
TEL 0442 251705
Major Credit Cards taken

New Libraries

GD PD has only been open for a month or so and already has an impressive list of software within it's library. The librarians, Dave, and his wife, Ged Lawson are also looking into software swapping overseas. What's more, they charge a mere 35p per disk side. The address is: 49 Woodville, Barnstaple, N. Devon EX31 2AY.

Also opened recently is Sleepwalker PD, run by a certain Joe Moulding (Mouldy PD would be plain silly). Joe claims that a lot of the software featured within the library is written by himself, in fact I have already seen a taster of his programming talents and it is of quite high quality. Software is supplied on tape and disk for just 50p per two sides. Write at once to: 9 Meeting House Lane, Balsall Common, West Midlands CV7 7FX.

Gratuitous plug



The latest issue of Tim B's stonking fanzine, *Artificial Intelligence*, is a special 32-page anniversary issue, with reviews of about 80 (yes Mrs Simpkins, that's eight-oh) PD disks, together with all the usual ~~tosh~~ top quality features. For your free sample copy, send £1.00 (to cover grouting costs) plus a stamped addressed envelope, to: Tim Blackbond, 19 Lee Street, Liversedge, West Yorks WF15 6DZ. Enclose a blank disk and you might even get some free software too (maybe). Go on, write that letter: you know you want to...

Gullam cleans the street

Matt Gullam, the librarian behind Presto PD has decided to re-organise the complete library, removing all the crap software. This includes the slideshows and bugged software. The new library looks very impressive, and it's nice to see a librarian putting a lot of work into a library's quality as opposed to size for a change. For the new catalogue, send an SAE to: Presto PD, 1 Pembroke Close, The Mount, Par, Cormwall PL24 2BT.

PD Public Image

Ey up, here's TIM BLACKBOND with all the latest public domain news and reviews...

POWERPAGE 128

by Richard Fairhurst

PowerPage is already the most popular DTP package on the CPC. Thanks to its appearance on an *AA* covertape, it has made its way into over 37,000 homes. True, just under half of those people will find it useless, but that's beside the point. But what can be done to better an already excellent package?

Well, the first thing would be to take out all the irritating disk overlays. Then, throw in a few extra features, you know, the ones that aren't possible with 64k machines. After that, why not make it compatible with ROMDOS? Oh yes, while we're at it, what the hell, let's put in a pop-up menu(*) system, a pattern fill routine and a zoom mode, enlarge the cursor a little bit then increase the speed and user-friendliness a tad. It's a tall order. So tall, in fact, that the spotty student behind the counter at Junk-Food King would be very reluctant to say 'You got it' when you make the request.

Most of the functions within *PowerPage* are split up into five sub-menus, selected from the main menu bar. These are:

Text: Consists of Set margins, Headline layout and Text layout. The latter two involve flowing text around graphics with either normal sized text or Stop Press headline fonts.

Block: Can only be selected when a rectangle has been defined on the page. This block can then be flipped on both axes, reversed, filled, wiped or saved as a clip art.

Page: Print and Clear are self-explanatory. Up, Down, Top and Bottom simply move to different parts of the page (each page consists of 70 lines spread over three screens).

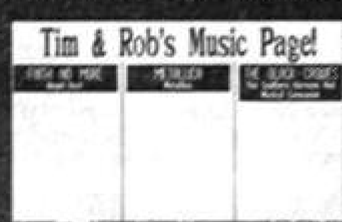
File: Includes Load/Save Page, Load 8x8 Font, 16x16 Font and Clip Art, Select Drive, Erase File and Catalogue. Those that need these explaining should stop reading now...

Settings: Includes Text Spacing, Line Spacing, Autoflow, Flow Style, Print Quality (there are eight print settings, of varying densities), Text/Headline Size, Text Style. These all affect the way the text appears on the screen.

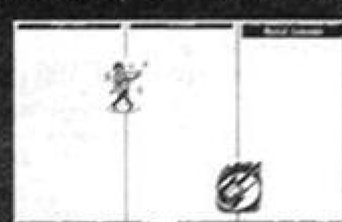
All in all, *PowerPage 128* is the best DTP you will find on the CPC. Yes, better than *Stop Press* even. At last – Desktop Publishing without the masochism. ●●●●●

Here's one I made earlier...

It's very easy to create a page using *PowerPage 128*. Tim B and his chum Rob Smith knocked an example page together in about three-quarters of an hour. Here's how they did it...



1 Every page has the heading and sub-headings. Three columns looks far better than two.



2 Just throw a bit of clip art in the margins to brighten the page up.



3 Now set the flow control to Justify for the text. See that lovely pop-up menu!



4 See how an inset box has been added at the bottom of the page. This adds variety.



5 There! All that's left to do is remove the column guides and print out your masterpiece...



The full page, in all it's glory. You can do a half-decent 8-page fanzine in as many hours.



making a game of it

PART FIVE

Finishing touches

Yep, it's what you've all been waiting for – the final instalment of our game development series. Our man with a handful of rainforest: ADAM PETERS.

A 3-inch disk sits on CodeMasters press officer Richard Eddy's desk. Scrawled in felt-tip on the white sticker used as a makeshift disk label are the words 'Wild West Seymour CPC (finished version)'. "We're happy with it," says Richard, "and the programmer is happy with it. It's the version that people will be buying."

A few miles down the road Pete Ranson yawns, rests his head on his desk and repeatedly groans out his wish to go home (or failing that, to the pub). This is Pete's first day back at work after a fortnight's holiday, and he's not really 'with it' yet. As far as *Wild West Seymour* goes, he doesn't need to be 'with it'. The game is finished and Big Red's role in the *Wild West* saga has come to an end.



"Coo, look. Have you read this in Amstrad Action about Wild West Seymour being finished?" "Come on, Richard, get on with it – we haven't forgotten you're paying for lunch."

"We've gone for quality not quantity" JON CARTWRIGHT

The Seymour story has relocated to the CodeMasters end of the A425, as the printing and production dates for the inlay are finalised. The big build-up for the game's launch has begun. Richard has started sending out press releases to all the relevant magazines and newspapers, and a decision is being made over how much to spend on advertising and promotion. The release date of September the 22nd looms ever closer.

"September the 22nd," mutters Jon Cartwright, as Pete Ranson's desk-bound groans echo round the Big Red office, "that's interesting. We didn't know the release date had been fixed. We're the programmers and no-one tells us anything." Oh dear, I hope we haven't started a big row here between Big Red and the Codies. Quick, better change the subject.

Their inlay: the story

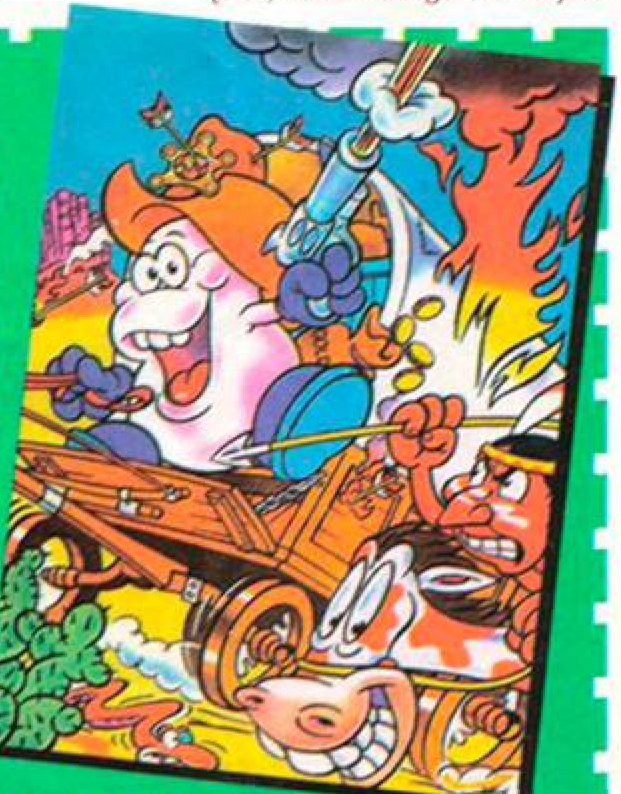
Ever wondered how a software house like CodeMasters produces an inlay card for a game? Wonder no more...

Fax machines. They're brilliant. Or at least that's what Codies creative director Shân Savage and illustrator John Haslan probably thought a couple of weeks ago, as they spent several days faxing back-and-forth roughs for the *Wild West* illustration. New changes and suggestions were marked on in pen as the digital postperson whizzed back and forth across the countryside. Many times over.

John is one of five artists that Shân uses for illustrations, each artist having their own particular style. "John is the perfect artist for Codies cartoon games," she says, "because his style is colourful and bold. He has an immediate feel for the image we're trying to create." The two of them had a head start with *Wild West*, courtesy of Big Red's Pete Ranson. Pete produced a rough of his idea for the inlay ("very few graphics people do that") and this was used as the basis for the illustration.

Once everyone's happy with the design, the illustrator spends a couple of days drawing up the final (full colour) version. As soon as the finished artwork lands on Shân's desk, the game logo is designed on the CodeMasters Apple Macs. A few different styles are used, and Shân selects the design she thinks will work best.

A standardised template is used for the inlay, with the logo and text placed in their correct position. The inlay design is sent on disk to a typesetting bureau to be printed out on to transparent films. These then get sent to a 'repro house' where they are combined with the illustration. The finished films go off to the printers, where the required number of inlays is produced.



The end game

A few things were cut towards the end, and a few things added after conversion from the Spectrum. Here they are...

Lost in the supermarket: Due to memory problems, the game has been cut down from five acts to four. Not much action has been lost though, as a lot of the missing act has been incorporated into the train section (which was originally only going to be six screens big, but is now much larger). The ending has been cut down a lot too, but it now provides a good link for the next game ("whatever that might be"). Loads of speech also had to be cut. Originally, the characters just yakked and yakked and yakked...



Now with added this: The CPC version features full colour sprites, not possible on the Speccy ("attribute problems") and the map has been changed to look extra nice on the Ammy. There's a palette switch halfway down the screen, so whilst the four colours in the panel at the top stay the same, the palette can be switched on the 'action screen' (e.g. when Seymour enters a tunnel). The Seymour sprite moves very smoothly, with no flicker at all ("he sometimes flickers a bit on the Spectrum version"). 6128 owners get even better animation, plus six different in-game tunes.

Er, how does *Wild West* differ from *Seymour Hollywood*, Jon?

"Well, for a start, all the things that were supposed to happen in *Seymour Hollywood* that didn't will be happening in *Wild West*."

Like?

"Seymour's hands were supposed to move. They did on the Spectrum version, but for some reason they didn't on the Amstrad."

Oops.

"They do move in *Wild West*, though. Look." He points to the screen. "Oh yes, and the end sequence didn't happen in *Seymour Hollywood* either, for some reason."

Double oops.

"But don't print that."

Treble oops.

"This is a very important game for us" RICHARD EDDY

"There aren't as many rooms in *Wild West* as there were in *Hollywood*, but the game takes up more memory. That's probably because of the text. We've put loads of text in, including lots of thought bubbles."

It's certainly a tight squeeze. *Wild West* takes up the whole of the available memory on the 464 (about 43K of the machine's 64K memory is usable in programming). The map takes up 5K, the same as the music (there's six different tunes on the 6128). The graphics and text each account for 10K, and the animation of the Seymour sprite requires 6K (an extra 4.5K on the 6128, which has more detailed movement). Everything that's left over is taken up by the program code itself. Even though it's a smaller game than *Seymour Hollywood*, that doesn't mean that any less time was spent on it.

"We've gone for quality not quantity," comments Jon, quotably.

"Yeah," mutters Pete, wearily.

Big Red are trying to 'sell' the game to me (well, Jon is, at any rate), whilst elsewhere an army of CodeMasters telesales people are trying to sell the game to the distributors and retailers. The Codies need to collect all the orders in advance to try and gauge how many copies they'll need to get made. The tapes are duplicated by Ablex (who also do *AA*'s covertapes), before being matched up with the inlay cards and those little plastic boxes that attract scratches like Tom Jones attracts grannies.

"This is a very important game for us," says Richard Eddy, "because we've got the *Superstar Seymour* full-price compilation coming out in a couple of months. How well *Wild West* does will leave an impression in the retailers and distributors' minds, and they'll be deciding how many *Superstar* packs to order on the basis of *Wild West*'s performance."

The game took under three months to program, meaning that it was easily finished on schedule. On completion of every major new version (the adding of a new act or a major change), Jon the programmer sent a copy of the game off to the Codies playtesters, who tried it out, located any new bugs or mistakes, and checked that earlier ones had been corrected.

So how does it compare to your previous game, *Prince of the Yolk Folk*, Jon?

"Well, it's bigger. It's taken a lot longer to produce, especially with all the 128K extras. There's a larger map, more puzzles... As for whether it's better or not, well that's for the reviewers and the customers to decide."

Indeed – *NEXT MONTH IN AA*
***Wild West Seymour* – the review**



WILD WEST SEYMOUR is finished at last. Next month it gets a full review in AA...

Looking back

Since AA80 we've been following the progress of WILD WEST SEYMOUR, right from the very first planning sessions up until the finished product. But now all the hype is out of the way, how has the project really gone? And what do you think of the finished game? Come on, now, be honest...



PETE RANSON,
COMPUTER GRAPHICS

"Me and Jon were both a bit disappointed that we had to cut it down so much towards the end. It was sad to see a lot of work we'd done being removed, due to lack of memory. As for the game, it's difficult to say – you get so close to a project that you don't really look at it in that way. The graphics are good. I'm quite happy with it, I suppose."



JON CARTWRIGHT,
PROGRAMMER

"It's much more than just a re-hash of *Seymour goes to Hollywood.* There's so much in it. A cracking game and six tunes, all for £3.99. What a barg, punters. Squelchtastic!"



RICHARD EDDY,
PRESS OFFICER

"Very much an excellent product to work on. Seymour is already well established as a CodeMasters character, and this is one of the few games recently to have run to schedule. It's good having the programmers just down the road, it's meant there's been no slip-ups at all."



SHÂN SAVAGE,
CREATIVE DIRECTOR

"It's all gone extremely easily. Big Red are a big help. Pete provided me with roughs of the illustration that I could work from. John Haslan, the illustrator, has done a wonderful job. The Seymour character is good fun to work with, and it's about time we had a Wild West illustration."



PAUL RANSON,
PROJECT MANAGER

"It's gone very well in terms of development. You can always rely on Jon to come up with a good game. They've added lots of in-jokes to it, without me knowing, and it's all very entertaining. There's jokes in there for everyone. I'm very pleased."



DAVE WARD,
PLAYTESTER

"It's ace, innit? It's as ace as Coventry. It was quite funny seeing the people I know in it. I really enjoyed it. It's absolutely brilliant. It's really good. It's great."

Hmm... we think they're biased!



Make some noise

Your computer could be your key to pop stardom. ADAM PETERS examines the whole CPC-MIDI-music-pop thang, and over the page we take a look at some of the packages available. From the top...

Burn your guitars kids, you don't need them any more (and you can't play anyway). Computers are where it's at musically right now. Just ask Altern 8, SL2, Prodigy, Kicks Like A Mule, Shut Up And Dance, Messiah, 2 Unlimited, Smart E's, Praga Khan, Inner City and thousands more.

The key to this music revolution is a wonderful invention called MIDI (Musical Instrument Digital Interface). MIDI is a kind of data language that allows electronic musical instruments to 'talk' to each other. It is possible to connect any MIDI-compatible instruments together, which will allow you to set them up to play in time with each other, use different items in conjunction (eg using a keyboard as a 'module' to play samples from a sampler), and so on.

MIDI really comes into its own when there is a home computer at the heart of the set-up. The computer that has become the most popular for MIDI music use is the ST, largely through being the only machine with an in-built MIDI port. But fear ye not, you can turn your trusty CPC into a throbbing MIDI beastie for as little as £50.

Being a techno pop star is the world's coolest profession

That money will buy you a copy of the *RAM Music Machine*, which consists of a MIDI interface (which plugs into the expansion port at the back of your machine) and some sequencing software. If you're prepared to splash out slightly more for a more advanced system, other combined interface and software packages include *EMR Miditrack Performer* (£99) and the DHCP Interface and 8-track Sequencer package (£105).

Sound it out

So what can you with a MIDI CPC set-up? First of all, as well as the computer, you're going to need some MIDI instruments. While the *RAM Music Machine* includes simple sampler and keyboard programs, and the DHCP package includes some demo files you can play around with, computer-based MIDI is really all about constructing 'tracks' using other MIDI equipment.

This doesn't work out that expensive. You can pick up a decent MIDI keyboard for about £100-£150, with a drum machine about the same



Assault on Number 13

Computerised techno music has taken over the pop charts – and it's been so easy! MARK FRITH reports...

Just look at any Top 75 over the last year and a half and you'll find a good dozen records made on small budgets and put together in bedrooms or small studios – on computers.

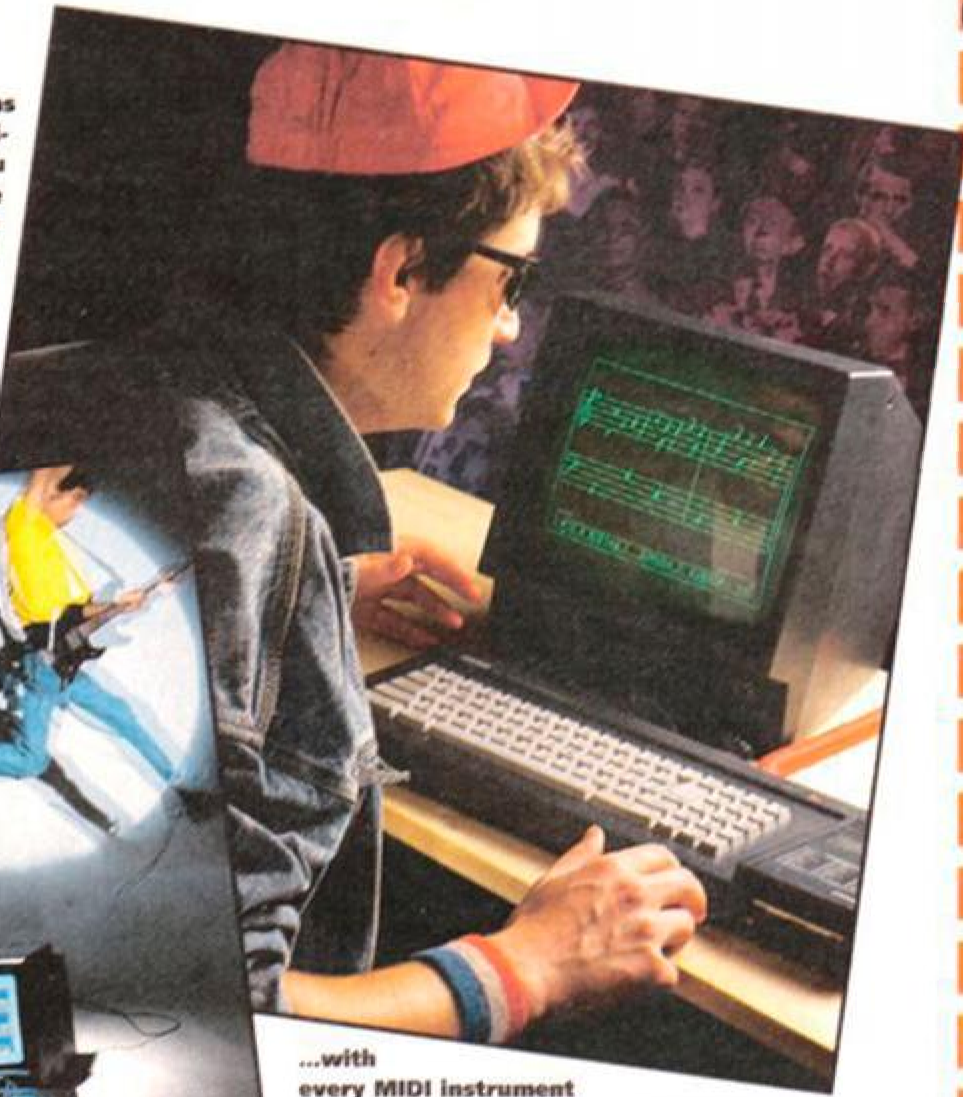
It's been a revolution and the seeds of it began in 1987. *Pump Up The Volume* by M/A/R/R/S was a record made by a loose collection of DJs, musicians and their friends. It was made up of illegal samples, strange computer noises, vague dance rhythms and cost virtually nothing to make. It was distributed through a small independent system. It sold half a million copies.

In the five years from then to now, the image of the lad with his Technics turntable, sampler and sequencer has been the key image of dance music.

Anyone can do it: it's ideas and technical know-how that gets you hit records these days. And even if you don't want to be dead famous you can still make music for your own amusement like Prince Be used to (see quote) or take it that step further and – with a bit of borrowed cash – make it into a proper record. And here's how you can do it...

1) Press up a couple of dozen 'white labels' (test pressings) of your record and send them to various trendy club and radio DJs. These people will play – and therefore promote – your record.

2) Phone up a reliable distribution company who will distribute your record around the shops. Get hold of a music business directory to get contact numbers.



Your CPC performs a number of musical functions. You can simply use the machine to compose tunes and drum riffs with the in-built sound chip, or else plug in a MIDI interface and let rip...



...with every MIDI instrument you can find (from keyboards to samplers to flash MIDI guitars). Sound.

price. In fact, you can pick up perfectly usable MIDI keyboards and beat boxes for as little as £40 each second-hand. It is easy enough to connect everything together and plug it all into the back of your CPC.

You then have a great degree of control. You can play things on the instruments and edit the length and tone of the music on screen. You can loop sections (using a 'copy' command) and adjust everything so the instruments all automatically play in time. You have even more power at your disposal if you use the *Foundation Step-Time Sequencer* (£35), which works with any MIDI interface and offers powerful individual note-editing facilities.

But what if you don't want to leap into the potentially expensive world of MIDI? You can have just as much fun using your computer purely as an instrument to play tunes on. There are a number of different programs available for this purpose, such as *Equinoxe* and *SuperSonic* (*AA83* covertape). There are also a number of drum machine programs, like *Amdrum* and *Drumkit* (*AA74* covertape).

Sample this!

Sampling is a growth area in computer sound technology. A sampling program allows you to transform sounds input through the MIC socket of your machine into digital data. This data can then be played around with: some programs allow you to loop the sample, change the pitch, and apply various other hi-tech effects. You can then use these samples in your compositions, maybe even going to the extreme of having a whole drum line or bass riff 'sampled' from another source (eg your favourite single). There are an increasing number of legal hassles surrounding using samples in commercial releases, but there's no harm to be had from playing around with samples in the comfort and safety of your own home.

Sampling programs for the CPC include the dk'tronics *Speech Synthesiser* and the brand new program, *The Digitiser* (£10). On top of that there's a fairly comprehensive sampling facility as part of the *RAM Music Machine*. Type-ins wise, there's *Sound Digitizer*, which first appeared in *AA15* and is currently available from a number of public domain libraries. ➡

Turn your CPC into a throbbing MIDI beast for as little as £50

3) Buy a nice spangly top and tell your mum to leave Thursdays at 7.00pm free.

Simple! (ish)

Of course, a lot of people see this pop stardom as being unfair; haggard old rock stars who've played grotty pub back rooms for years without a taste of success believe that you, as a successful computer-based pop star, somehow haven't "paid your dues" (ie carrying your equipment on the bus and getting depressed). Ignore these bitter people. Being a techno pop star is the coolest profession in the world – and you will barely need to step outside your bedroom.

Photo: Leading computer pop technicians Altern 8 promote our Christmas issue.

The stars speak

Is it really that easy to knock up a hit record with just a handful of computer equipment? Here's what some residents of Planet Pop have to say...



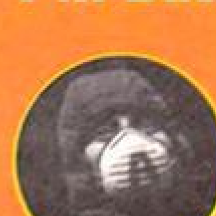
"These days a bloke with a pair of turntables and a box of records can make it to the top with a little help from a sample machine, squiggly bass line and beat box. With all the new technology that's available, the future is ours."

BILL DRUMMOND, The KLF



"I do all my original demos with two cassette decks and a microphone. I loop on the cassette deck using the pause button – you have to be extremely precise. Then I'll play that into another cassette and try and sing something on top."

PRINCE BE, PM Dawn



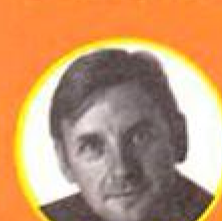
"We started off with a tiny £50 sampler and a pair of DJ turntables. That's all you need at first. You can make good stuff with just that, but the secret is to buy a little more equipment with every extra bit of money you get. Then you can start to get more adventurous."

MARK ARCHER, Altern 8



"You don't need these big posh-floored studios these days, they're so out of date. I'm keeping it small with new technology. That's what interests me, the stuff on the streets. That's where the real ideas are."

MARTIN PRICE, ex-808 State



"With computer-made techno music it's the pure excitement of the music that counts. People who say music made with computer equipment isn't music have got their heads stuck in the sand."

PETE WATERMAN, producer

Make Some noise

Beats working

So what sort of person is likely to be interested in using their CPC for musical purposes? Anyone with even a remote interest in music, really. While all this talk of sampling and the like tends to suggest an emphasis on modern 'house' music, there are a wealth of different things you can do with your CPC in the world of sound: no-one need feel left out. Fans of classical music might enjoy 'composing' their favourite pieces on CPC packages such as *Equinoxe* or *SuperSonic*.

The machine's three in-built sound channels are easily enough to create a very sophisticated sound. You could use one channel for bass sounds, one for a melody line, and the third for a drum riff (you can get plenty of reasonable drum noises out of the CPC's sound chip). You don't have to be a baseball-capped raver, eager to pump up the volume on 16 MIDI tracks, to find a use for computers in your music. Simple type-ins like *Drumkit* or *Synth* (*AA76* free booklet) present an easy (and free) doorway into the wonderful world of CPC music.

And when you feel like making the next step up, there are a number of packages vying for your attention. While some CPC music software – being very specialised – is quite hard to get hold of, there are actually more different packages available now than ever before. On the right we review and rate some of the more popular programs, while below we tell you all about next month's 'miss it at your peril' second instalment of CPC music. Till then... make some noise!

It's not over yet!

Well that's all the background, info and product evaluation out of the way. Next month we conclude our music feature with a practical example of making CPC music.



We lock two volunteers in a room for a few hours with only a CPC, MIDI interface and a few pieces of music kit to keep them company. Find out how the experiment went in next month's magazine and hear the tune they produced for yourself on our covertape. Sorted.

Shopping for sounds

Here's a selection of some of the more popular music programs (both MIDI and non-MIDI) available for your machine, and details of where to get 'em. Tune in, turn on, rock out!

DHCP Interface & Sequencer
0440 61207 • £105

DHCP's MIDI interface (£70 without the software) is the most expensive, but you can 'feel the quality'. The 8-track sequencing software (disk only) is very user-friendly, with everything on show on a single screen. The memory will store a song of approximately five minutes in length (only a sozzled Pink Floyd fan would need longer). Every feature you'd expect for semi-professional use is here: MIDI clock, quantisation, etc. ●●●●

Drumkit
AA74 covertape

It's fun and it's free! This type-in and covertape prog (back issues still available, drumheads) is a 48-step, three-channel and eleven-sound drum machine. There's full save and load facilities and you can build up some really kicking rhythm tracks with the program. Safe. ●●

EMR Miditrack Performer
0702 335747 • £100

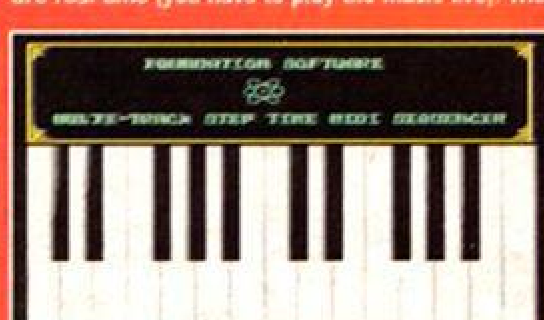
Widely acknowledged as the best of the CPC sequencers, *Performer* consists of an interface plus software on both tape and disk. The program offers an excellent icon-ed up main screen, sequencing on eight MIDI tracks, plus a whole host of editing facilities, including loop, filter, transpose and chain. The program allows you to merge tracks, meaning that you can actually have up to a whopping 29 tracks in memory, though not all will be editable. Performer is a brilliant program and excellent value. Give EMR a ring for more details, and info on their new program *Music Editor* (£25). ●●●●●

Equinoxe
0458 74011 • £30

Most music programs are very dull-looking. Not *Equinoxe*, the program that put the 'fun' in musfunic. The main screen shows a keyboard and LED track indicators. Other screens are even more colourful, with icons, histograms and more. There's a lot you can do with the program, and once you've got past the problem of all the on-screen text being in French (which isn't really a problem), you can start knocking up your keyboard and drum numbers. It's not MIDI, and uses the in-built sound chip. The results are great, though. Our mail order department (the only British distributors) still have a handful of copies. Give them a ring on the number above if you're interested. ●●●

Foundation Step-Time Sequencer
0279 725788 • £25

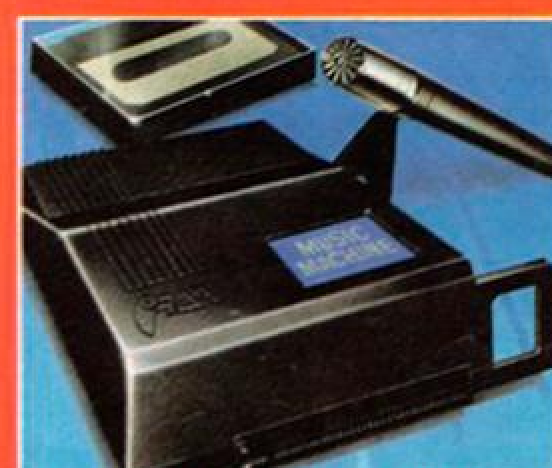
'The only step-time sequencer available on the Amstrad' it says here. Other MIDI CPC sequencers are real-time (you have to play the music live). With a step-time editor you can enter the notes one at a time, constructing the track piece by piece. The Foundation sequencer can be used with any of the three CPC MIDI interfaces (EMR, DHCP or RAM). It offers the full sixteen MIDI tracks and is so good we reckon you should get a copy even if you're already getting a sequencer with your interface. It's disk only and it's fab. ●●●●●



The one and only step-time sequencer for the Amstrad CPC!

RAM Music Machine
071-580 6460 • £50

The RAM Music Machine is probably the most well known CPC MIDI program. The sequencing part (the music editor) is incredibly basic, but this is offset by some of the other programs that go up to make the package. The sampler, for instance, is superb, offering a host of editing facilities (though the maximum sampling time of 1.22 seconds is a bit limiting!). There is a drum editor which uses pre-sampled drum sounds, making it the most professional-sounding CPC drum machine. The whole package contains a MIDI interface, software on tape (you'll have to hunt around for a disk version), a microphone and a pair of headphones. The Datel shop in London have a few copies left: ring them at the number above. ●●●●



The RAM Music Machine is the CPC's best-known MIDI package.

SuperSonic
AA83 covertape

AA techie wizard Richard Fairhurst's contribution to the world of CPC sound is an *Equinoxe* style program. It uses the machine's three sound channels, with keys on the keyboard representing different notes. You can edit the pitch, speed and other aspects of the sound envelope. The *AA83* covertape (see Back Issues, page 50) also included a compiler to convert *SuperSonic* tunes into a format in which they could be incorporated into your own programs (as a title tune, for instance). ●●●

The Digitiser
Sounds Like PD, 6 Keyberry Park, Newton Abbot, Devon TQ12 1BZ • £10

Hot off the disk drive comes this new program from Sounds Like, public domain music specialists. The package contains a disk, a manual and a specially designed lead that allows you to connect your CPC to a hi-fi (so you can make a big noise). The digitiser lets you sample off tape (using the in-built tape machine on the 464 and an external tape deck on the 6128). The program can create samples of up to 14 seconds in length, which is pretty long. An interesting (and cheap) program. ●●●

FREE CATALOGUE

COMPLETE & RETURN THE COUPON BELOW
FOR A FREE 64 PAGE COLOUR AMIGA CATALOGUE

FREE! FROM SILICA



When you buy your new Amiga computer from Silica Systems, we will give you an additional £369.73 worth of software FREE OF CHARGE, including some great entertainment and productivity programs. These free gifts will introduce you to the world of computing and help you to get off to a flying start with your new Amiga. Plus, with every Amiga from Silica we will give you 16 nights FREE holiday hotel accommodation for you and your family to enjoy a break at home or abroad.

16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Amiga 500 and 600 from Silica comes supplied with a free 72 page colour brochure with accommodation vouchers. These entitle 2 people to stay up to a total of 16 nights in any of 250 hotels with accommodation FREE. All you have to pay for are your meals (prices are listed in the brochure).

ARCADE ACTION PACK:

10 Superb entertainment titles:

ASTERIX	£24.99
CHESS PLAYER 2150	£24.95
DRIVIN' FORCE	£24.95
LIVE AND LET DIE	£19.99
ONSLAUGHT	£24.99
PIPE MANIA	£24.99
RICK DANGEROUS	£24.99
ROCK 'N' ROLL	£19.99
SKWEEK	£19.99
TRIVIAL PURSUIT	£19.95

PRODUCTIVITY:

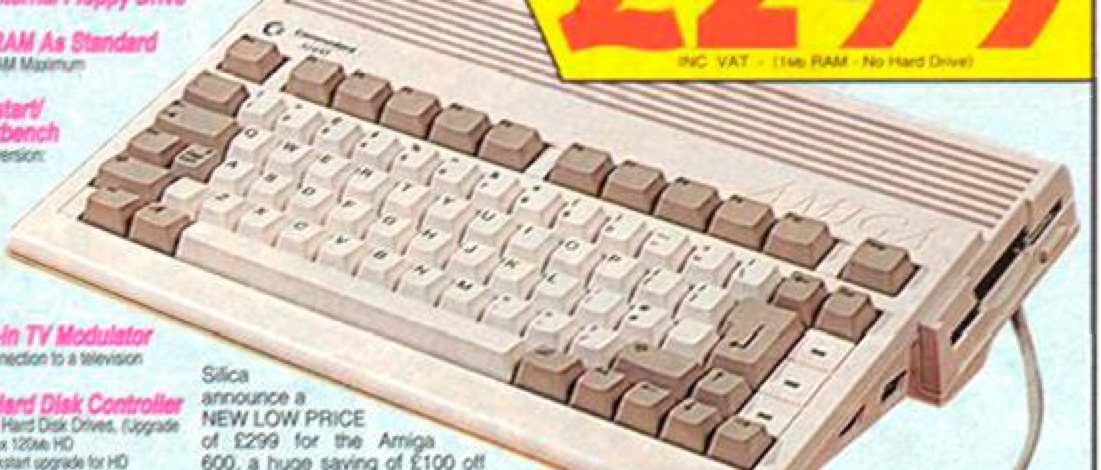
PHOTON PAINT 2.0 (The recommended paint package)	£89.95
GFA BASIC V3.5 (A powerful basic interpreter)	£50.00
TOTAL VALUE:	£369.73

WORTH NEARLY £370!

AMIGA 600 - NEW LOW PRICE!

£299

INC VAT - (1Mb RAM - No Hard Drive)



NEW! Compact Design
35cm x 24cm x 7cm
78 Key Keyboard

3½ Internal Floppy Drive

1Mb RAM As Standard
10Mb RAM Maximum

Kickstart/ Workbench
Latest version: v2.05

Built-In TV Modulator
For connection to a television

IDE Hard Disk Controller
For 2½" Hard Disk Drives. (Upgrade kit to max 120Mb HD also Kickstart upgrade for HD support available soon)

Hard Disk Model Available
With 20Mb 2½" Hard Disk Drive

Smart Card Slot
Built-in as standard

Trapdoor Slot
For optional plug-in Chip RAM and battery backed clock

2 x Joystick/Mouse Ports
Easy access - located on right side of A600, in front of disk drive

Composite Video Output
Full colour composite video output for connection to most monitors

1 Year On-site Warranty

Silica announce a NEW LOW PRICE of £299 for the Amiga 600, a huge saving of £100 off the previous RRP of £399! With its modern compact wedge shape design and the employment of the latest advancements in Amiga technology, it represents the very best investment for home computing. It has all the power of a first class games console with a full range of entertainment software available, as well as being a true home computer, with business and education software and an extensive range of peripherals and accessories.

The Amiga 600 uses state-of-the-art surface mount technology, for maximum reliability and features a 3½" floppy disk drive, mouse, TV modulator and smart card slot all as standard. The innovative smart card slot accepts games, ROM or RAM cards (from 1Mb up to 4Mb) and will take advantage of many future new developments. The very latest version of the operating system, Kickstart/Workbench v2.05 is used in the Amiga 600 and its enhanced chip set facilities include improved graphics resolution, increased genlock support and the facility for up to 2Mb of chip memory. The Amiga 600 is fully compatible with the A670 CD-ROM Drive and Interface which will give it access to a full range of CDTV titles and audio CDs. The Amiga 600 is available from Silica in several configurations (see below) including a specially upgraded 2Mb RAM version.

FREE GIFTS FROM SILICA - SEE PANEL TO LEFT

AMIGA 600 CONFIGURATION OPTIONS

NEW! FROM SILICA 2Mb RAM OPTION WITH CLOCK (BATTERY BACKED)

	0Mb Hard Drive		20Mb Hard Drive	
	1Mb RAM	2Mb RAM	1Mb RAM	2Mb RAM
• 1Mb AMIGA 600 + MOUSE	£299.99	£299.99	£299.99	£299.99
• 1Mb RAM UPGRADE	N/A	£60.00	N/A	£60.00
• 20Mb HARD DISK	N/A	N/A	£299.00	£299.00
• DELUXE PAINT III	£79.99	£79.99	-	-
• 'MYSTERY' GAME	VARIABLE	VARIABLE	-	-
• 1 YEAR ON-SITE WARRANTY	✓	✓	✓	✓
PLUS! - FREE FROM SILICA				
• PHOTON PAINT v2.0	£89.95	£89.95	£89.95	£89.95
• ARCADE ACTION GAMES PACK	£229.78	£229.78	£229.78	£229.78
• GFA BASIC INTERPRETER v3.5	£50.00	£50.00	£50.00	£50.00
TOTAL PACK VALUE:	£749.71	£809.71	£968.72	£1028.72
LESS PACK SAVING:	£450.71	£460.71	£519.72	£529.72
SILICA PRICE:	£299	£349	£449	£499

PERIPHERALS FOR AMIGA COMPUTERS

AMITEK RAM BOARDS (A600)



Upgradable RAM board available with 0K, 512K and 1Mb of RAM. Built-in battery backed clock. Plugs straight into the Amiga A600 trapdoor. No soldering required - 2 year guarantee.

SLIMLINE DISK DRIVE



19mm Super Slimline colour co-ordinated 3½", 1Mb, double sided disk drive. Draws power from the Amiga and includes thru-port for connection of additional drives. 1 year replacement guarantee.

RAM UPGRADES

CODE	DESCRIPTION	RRP	SILICA PRICE
RAM 0600	AMITEK - 0K Populated - A600	£29.95	£27.95
RAM 0605	AMITEK - 512K Populated - A600	£44.95	£39.95
RAM 0610	AMITEK - 1Mb Populated - A600	£60.00	£50.00
RAM 0580	CBM 512K Board - A600	£24.99	£22.99
RAM 0501	CBM - 512K Board - A500	£99.99	£49.99
RAM 0505	512K Board - No Clock - A500	£24.95	£19.95
RAM 0510	512K Board - inc Clock - A500	£29.99	£24.95

EXTERNAL DISK DRIVES

CODE	DESCRIPTION	RRP	SILICA PRICE
DRI 0555	SLIMLINE - 3½" 1Mb - Ivory Colour	£79.00	£54.95
DRI 2956	ROCLITE - 3½" 1Mb - Ivory Colour	£69.95	£64.95
CCA 6011	ROCLITE - 3½" 1Mb - Black Colour	£69.95	£64.95

PRINTERS

CODE	DESCRIPTION	RRP	SILICA PRICE
PRI 3705	CBM MPS 1270 Ink Jet Printer	£149.99	£129.00
PRI 3230	CBM MPS 1230 9 Pin Dot Matrix	£169.99	£139.00

COLOUR MONITORS

CODE	DESCRIPTION	RRP	SILICA PRICE
MON 6144	GOLDSTAR TV/Monitor inc cable	£199.95	£179.95
MON 4184	CBM 1084S Monitor inc cable	£299.99	£249.95

ROM UPGRADE

CODE	DESCRIPTION	RRP	SILICA PRICE
UPS 1100	ICD Kickback K1.3 ROM Swapper	£24.95	£19.95

AMIGA 500 STANDALONE



HARDWARE

- 512K AMIGA 500 COMPUTER — £299.99
  Inc. 1Mb 3½" Disk Drive, Mouse Controller, Power Supply, Workbench 1.3 & Manuals
- 512K RAM EXPANSION TO 1Mb RAM — £24.95
- A520 TV MODULATOR — FREE

PLUS! - FREE FROM SILICA

- PHOTON PAINT V2.0 — £89.95
- ARCADE ACTION PACK — £229.78
- GFA BASIC — £50.00

TOTAL PACK VALUE: £694.67
LESS PACK SAVING: £395.67
SILICA PRICE: £299.00

ORIGINAL AMIGA 500 WITH BUILT-IN 18-KEY NUMERIC KEYPAD

£299 INC VAT - Ref: AMC 0510

CDTV COMPUTER SYSTEM SAVE £200!

INTERACTIVE MULTIMEDIA

UPGRADE YOUR AMIGA 500 FOR ONLY £399

We are pleased to announce a very special trade-in offer to Amiga 500 owners who are keen to take advantage of the extra benefits offered by Commodore's multimedia innovation, the CDTV.

Amiga owners who return their working Amiga 500 computer (with Kickstart V1.2 or 1.3), mouse, power supply and manual to Silica, can claim a £200 discount off the price of the new Amiga CDTV Computer System. This new system (normal RRP £599) is fully compatible with all Amiga software. In addition, it provides access to a vast range of CDTV titles. CDTV works much like a standard Amiga 500 or 600 but has many additional features including a compact disc drive that can hold up to 550 megabytes of information per disc as well as play audio discs to a very high quality. CDTV comes supplied with the latest infra-red remote control handset, giving you full control of your system from the comfort of your armchair.



TRADE-IN OFFER

CDTV SYSTEM	£599
AMIGA 500 TRADE IN	-£200
YOU PAY	£399

£399 INC VAT - Ref: AMC 1250

FEATURES INCLUDE:

- Full Compatibility With Existing A500 Software
- 1Mb Chip RAM
- CDTV Player
- Plays Audio CDs & CD + Graphics Discs
- Full QWERTY Keyboard
- Built-in Monitor, Serial & Parallel Ports as on the A500
- 880K 3½" Disk Drive
- Mouse Controller
- Infra-Red Remote Control
- Workbench 1.3 & Manuals
- Welcome CD + Caddy

ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

SILICA SYSTEMS OFFER YOU

- FREE OVERNIGHT DELIVERY: On all hardware orders shipped in the UK mainland.
- TECHNICAL SUPPORT HELPLINE: Team of technical experts at your service.
- PRICE MATCH: We normally match competitors on a "Same product - Same price" basis.
- ESTABLISHED 14 YEARS: Proven track record in professional computer sales.
- £12 MILLION TURNOVER (with 60 staff): Solid, reliable and profitable.
- BUSINESS + EDUCATION + GOVERNMENT: Volume discounts available 081-308 0888.
- SHOWROOMS: Demonstration and training facilities at our London & Sidcup branches.
- THE FULL STOCK RANGE: All of your requirements from one supplier.
- FREE CATALOGUES: Will be mailed to you with offers + software and peripheral details.
- PAYMENT: Major credit cards, cash, cheque or monthly terms.

Before you decide when to buy your new Amiga computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Amiga, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for almost 14 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest FREE literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE 081-309 1111

SILICA SYSTEMS

MAIL ORDER: Order Lines Open: Mon-Sat 9.00am-6.00pm	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX (No Late Night Opening)	Tel: 081-309 1111	Fax No: 081-308 0608
LONDON SHOP: Opening Hours: Mon-Sat 9.30am-6.00pm	52 Tottenham Court Road, London, W1P 0BA (No Late Night Opening)	Tel: 071-580 4000	Fax No: 071-323 4737
LONDON SHOP: Opening Hours: Mon-Sat 9.30am-6.00pm	Selfridges (1st Floor), Oxford Street, London, W1A 1AB (Late Night: Thursday until 8pm)	Tel: 071-629 1234	Extension: 3914
SIDCUP SHOP: Opening Hours: Mon-Sat 9.00am-5.30pm	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX (Late Night: Friday until 7pm)	Tel: 081-302 8811	Fax No: 081-309 0017

BECAUSE *HOW* YOU PLAY IS AS IMPORTANT AS *WHAT* YOU PLAY, FUTURE PUBLISHING ANNOUNCES A MAGAZINE THAT BRINGS YOU THE BEST OF BOTH.



The Super Nintendo: The world's best games machine, worked on by the world's best programmers. This year it's been the hot item to talk about, next year it'll be the one machine you simply have to own.

Super Play magazine: Brought to you by Europe's leading publisher of games magazines, Super Play will be the best because Future magazines have always been the best.

NINTENDO MAGAZINE

or yourself. First issue October 1st.

AA SMALL ADS

For Sale

AMSTRAD CPC 464 with colour monitor, manual, games worth £200, two joysticks, 15 AA covertapes, 27 AA magazines, Mini Office II, Darkside, Driller, all in very good condition. £225. Phone Tunbridge Wells (0892) 655582.

CPC 464 Green monitor, modulator, light gun, Amstrad Action issues 48 onwards, 150+ games. Quick sell, first come first served. £300. No splits. Phone Ciaran (0384) 397452.

TAPES, SOCCER Stars, Simpsons, Alien Storm, Gazza Pack, Gremlins 2, Golden Axe, etc. 120 games and joystick. Worth £480, will sell for £230 o.n.o. Please ring Peter on 021-453 8607 (Birmingham).

CPC6128 COLOUR monitor, tape-deck, mouse, joystick, Multiface II, OCP Art, 100+ games, mostly disk, 25 blank disks. All fully boxed. Worth £1200+, sell for £475 o.n.o. Phone (0329) 41422 after 5 pm.

AMSTRAD 464. Colour monitor, keyboard, new joysticks, Lightpen, 150 games with manual, Amstrad books, many blank tapes plus teak desk for Amstrad monitor etc. £250 o.n.o. Phone (0843) 860926 Kent.

AMSTRAD CPC464 with colour monitor, user's instruction manual, joystick, 70 games, Lightpen, and plenty of AA magazines plus covertapes. All still boxed. £175. Tel (0204) 693264.

CPC464 COLOUR together with joystick, manuals, over 180 games and AA magazines numbers 1 - 79. All in very good condition. £300 o.n.o. Phone Joe (0420) 473973 (Hampshire).

MEGA DISK! 15+ utilities including Database, Bank Manager, Character Designer, File header reader and Archiver. For your copy, send SAE, disk and £3 to: 88 Bedford Road, Letchworth, Herts, SG6 4DU.

AMSTRAD 464 colour with disk drive. Over 100 tapes and disks. £300 o.n.o. Call Ann on 081-505 2895 (London suburb).

ORIGINAL STRATEGY Board games for CPC's, Cloaker, Pacifist, Sector 5, General X. £1.50 each plus your tape(s) disk(s). Write for free information sheet to: A Swinbourne, 11 Vicarage View, Redditch, Worcs B97 4RF.

AMSTRAD 464 plus with colour monitor, joystick, games, magazines. One year old, excellent condition. £275. Phone Justin on (0553) 761109 (Norfolk).

CPC 6128 colour monitor, Epson LX400 printer, games, serious software includes Elite, Lurking Horror, Mini Office II, tapes, disks, operating manual CP/M ribbon. Excellent condition £350. Call David on 071-254 4916 after 6pm weekdays.

AMSTRAD CPC464 with colour monitor, user instruction manual, joystick and over 150 games (alone in excess of £750), quick sale, bargain only £200 or best nearest offer. Tel (0245) 328444.

DATAPHONE Designer Modem plus K.D.S Electronics Serial Interface with Comms Pack 5 Software. Boxed/Manuals/Cables. £90 o.n.o. Also CPC cassettes/disks/books for sale. Phone for list. Tel 071-822 3727 (Roger).

CPC464 Colour monitor with joystick plus games. Bargain for only £100 o.n.o. Phone (0883) 715193. Arthur (Surrey and London).

AMSTRAD CPC6128 with colour monitor, 3.5" disk drive, Multiface II, tape deck, over 150 games, disk and tape. All leads, dust covers, manuals, lots of magazines and more. £250 o.n.o. for the lot. Tel (0780) 720555.

Wanted

WANTED: PD/Shareware library wants your original work. Program of month gets NZ$20. Please send 2 IR Coupons if you want tapes/disks returned. Send to: PD Lib, 1/79 Luanda Drive, Ranui, Auckland 8, New Zealand.

WANTED: DDI-1 CP/M 2.2. Phone Ciaran (0384) 397452.

Other

LISTINGS - lots of them on 3" disks. Mostly games or graphics, some from 1985, for £3 only. From: Angela Allum, 22 Point Royal, Bracknell RG12 7HH.

PAGEMAKER DELUXE Desktop Publisher for the 6128/664+64K. Features: Stop-Press, Clip-Art, compatible. Word processor, text import and more. AA verdict 93%! Special price, £2.95 + disk and SAE. Send to PMD, PO Box 435, Glasgow G12 8SG.

PROBIRD: Professionally programmed birdwatchers Database. Now available for 6128. It's fast, efficient and field tested. Excellent manual, user support back up. Details: Probird, 37 Essex Road, Stamford, Lincs PE9 1LG.

AA SMALL ADS

This section offers you a really cheap and effective opportunity to speak direct to 35,000 CPC owners – or would-be owners. Users report excellent results.

You can place an ad up of up to 30 words for just **£5**.

So you could use it to sell a printer, launch a user group or advertise a piece of software you've written.

One thing you can't advertise is the sale or swap of software. Such ads can be misused by pirates.

Fill in the application form and send it to us together with payment.

We'll place the ad in the next available issue (published 2-7 weeks after we receive your order).

ORDER FORM

SEND TO AA SMALL ADS, FUTURE PUBLISHING LTD, BEAUFORD COURT, 30 MONMOUTH STREET, BATH, AVON BA1 2AP

Please place the following advertisement in the next available issue of *Amstrad Action*

Name ______________________

Address ______________________

____

____

Telephone ______________________

I enclose payment of £5.00 by Cheque/ P.O/ Access/ Visa

Credit Card number ______________________

Credit Card expiry date ______________________

Classification. Tick box: ❑ For sale ❑ Wanted ❑ Services ❑ User Groups ❑ Other

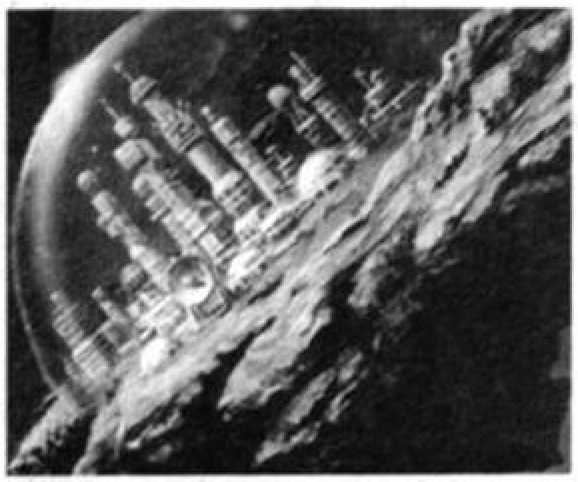
Write your advertisement here, one word per box. Include your name and phone number if you want them

Balrog

Tell the Balg what you really think about the column in the Balrog questionnaire this month AND vote for your favourite adventures in the Balrog awards. Meanwhile, thanks to Thomas Christie, Alan Hatrick, Bill Jenkins and Edmund Spicer for this month's tips...

Marsport

- Regularly save the game.
- You must make a map.
- Gunpermit at Elis 'G' is the key for the gun locker at Daly 'D' (remember to load gun at charge unit).
- Flour, water and baking tin factor a cake (key to bakery).
- Charcoal and gauze factor a gasmask for danger room at Iaxa 'C'. Place mask in locker inside danger room for further use.
- Glass, frame and sunchart factor eyeshield for use in astronomy room on Alba level.
- Earthmap is the key to the soil depot on Gill 'E'.
- Ice Pack is key for hothouse on Gill 'C'.



Stuck in Marsport? Here are some tips that might just help you out...

Quad X - II

- To get water from well: Insert handle in the hole, turn handle, tie bucket to rope, turn handle, turn handle, untie bucket. Throw water over snake.

Revenge

- Burn the letter in the bucket.

Sorcery +

- To kill the Necromancer you need four Golden Hearts. Each of these hearts must be carried into the Necromancer's chamber, and then fired at him.

Two of the Golden Hearts are readily available on the level. The third can be released by unlocking a door to get a Pilot Light and using that to open a second locked door to Gatwick Airport where a Strangeloop cassette is to be found.



How do you kill the Necromancer in Sorcery Plus? The answer's right here...

This cassette will free the first level by carrying over a jewelled crown. This crown will change into the fourth golden heart on entry into the second level.

Very Big Cave Adventure

- To kill the pirate give him the food.
- What to do with the utility belt:

Balrog Awards/Questionnaire

This month the Balrog embarks on a quest for readers' opinions – in other words, to find out what you really want out of the Balrog column!

You also get the chance to vote in the Balrog awards by filling out the bottom of the form.

So if you have some comments about how the Balrog column can be improved, or if you want to vote for your top five all time favourite adventures then here's your chance.

The first couple of readers out of the hat will receive an adventure from the Balg's extensive software collection. You can stay anonymous if you want but you won't be entered into the draw. Why not also send in some contributions along with the form?

Name: ....

Address: ....

....

Sex: .... Age: ....

Computer: .... Tape/disk: ....

Please rate the following Balrog features out of 10 (there's space at the end to include any comments you want to make):

The Balrog column ....

Cluepot ....

Letters ....

Lords & Ladies ....

Balrog reviews ....

Hobbit reviews ....

Orc reviews ....

GAC clinic and tutorial ....

Suggestions and remarks: ....

....

....

Balrog awards

All-time top five adventure games:

1 ....

2 ....

3 ....

4 ....

5 ....

Best text adventure of the year: ....

Best graphic adventure of the year: ....

Best PD adventure: ....

Best software house: ....

Best PD Library: ....

Adventure personality of the year: ....

Most promising author: ....

Getting in touch with the Balrog

If you want to contact the Balrog with any hints, tips, news or other adventuring queries, write to: The Balrog, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW. Don't forget, if you're stuck in an adventure, take a look through the lists of the Lords and Ladies of Adventure...

FILE used to file the chain on the table.
PARQUET used to kill the triffid
BICARBONATE used to cure the giant
SLEDGEHAMMER used to break down the huge door in the "vast passage" location.

Wolfman

• To get out of the house safely you must first wash your hands in the water, then look at the mirror, wash your face in the water, examine chest, take off doublet, burn doublet, examine drawer, get the tunic and wear it and then leave the room.

Simply Magic

• David Sizmur has come to the aid to Lee Hatton – the code for the silver casket is "SEED". To get the parchment you'll need to put the block of ice on the button to keep it pressed.

GAC Programming Clinic

If you have any questions on the use of GAC, specific GAC-related problems and queries or hints and tips of your own then jot them down and send them to: GAC Programming Clinic, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW. We put the program on a covertape, so we want to see you use it!

Help!

Stuck in an adventure? Or desperately trying to find one? The helpline is the place for you! Just send a postcard to: **Balrog's Helpline, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW.**

Mr D. J. Gahan would like tips for *Tir Na Nog*.

Nick Carter from Portsmouth is having problems in *The Fourth Protocol* – he can't seem to access the files at Blenheim so he keeps getting sent to the Falkland Islands.

Andrew Pond from Croyden is stuck in *Venom* and *Shard of Inovar* – in *Venom* he doesn't know how to get past the watchers and in *Shard of Inovar* he doesn't know how to get the amulet of fire. Can anyone help?

Lords & Ladies of Adventure

The Lords and Ladies of Adventure are experienced adventurers who have completed all the games on their lists. They are now prepared to share their knowledge with other games players.

If you have a problem with any of the games on these lists, write to the Lord or Lady concerned – make it brief, though, and do NOT ask for complete solutions.

Castle Blackstar • Heavy on the Magic • Indus Valley • Never Ending Story • Orb Quest.
Andy Clayton, 29 Portman Road, Scunthorpe, South Humberside, DN15 8PD. Tel: 0724 872135 between 6pm and midnight. (*You should have the manual now Andy! – Balg*)

Adult II • Al-Strad • Antidote • Atalan • Bestiary • Big Top • Black Fountain • Black Knight • Boggit • Bored of the Rings • Boredom • Can I Cheat Death? • Case of the Mixed-Up Shymer • Castle Adventure • Cave Capers • Caves of the Bew Bews • Conch • Crispin Crunchy • Dick 'ed • Dungeon • DAA • DAAW! • Detective • Doomlords • Escape from Planet of Doom • Escape from Prison Planet • Firestone • Flook • Forest at World's End • Gerbil riot of '67 • Ghost House • Grue Knapped • Heroes of Karn • Helvira • Hobbit • Hounds of Hell • House out of Town • Imagination • Jason and the Argonauts • Jewels of Babylon • Labyrinth • Lighthouse Mystery • Lost Scroll • Magician's Apprentice • Message from Andromeda • Nite Time • Orb Quest (Pt. 1) • Orifice from Outer Space • Panic beneath the Sea (pt. 1) • Power Curse (Pt. 1) • Prison Blues • Quest • Quest for the Golden Egg-Cup • Robocide • Roog • Rouge Midget • Scary Tales • Seabase Delta • Souls of Darkon • Spaced Out • Spacy • Star Wreck • Subsunk • Tealand • Theseus (pt. 1) • Thiefs Tale • Tizpan • TRD • Use your Loaf • Videoworld • Welladay • Yarkon Blues • Yawn • Help for Quill users.
Simon Avery, 71 Fore St, Chudleigh, Newton Abbot, South Devon TQ13 OHT.

Hitchhiker's Guide • Leather Goddesses • Lurking Horror • Moonmist.
Ken Dean, 63 Elmhurst Avenue, Oulton Broad, Lowestoft, Suffolk NR32 3AR.

Aftershock • Brawn Free • Cacodemon • Case of the Mixed-Up Shymer • DAA • Espionage Island • Experience • Fantasia Diamond • Forest at World's End • Frankenstein • Grange Hill • Haunted House • Heroes of Karn • Imagination • Inca Curse • Kobyashi Naru • Lancelot • Loosed Orc • Lords of Time • Message from Andromeda • Mindshadow • Pirates • Planet of Death • Quest for the Golden Egg-cup • Rigel's Revenge • Seabase Delta • Ship of Doom • Spytrek • Subsunk • Terrormolinos • Three Weeks in Paradise • Trial of Arnold Blackwood • Warlord.
Debby Howard, 10 Overton Road, Abbey Wood, London SE2 9SD.

News

Adventure Probe folds

Due to financial pressures, *Adventure Probe*, the longest running adventure fanzine and one of the best, has sadly had to close.

There is a possibility of someone else taking over the editorship but this is unconfirmed at the moment.

The Balrog would like to express his condolences to the editor Mandy Rodrigues HBalg – *Adventure Probe* was one of the Balg's favourite fanzines and it is a great shame to see it go.

Adventure Convention date announced

The third annual Adventurers Convention (formerly the Adventure Probe convention) will be taking place at the Royal Angus Thistle Hotel in Birmingham on Saturday, 24 October 1992. More details and tickets (at only £7 each) are available from: Vicky Jackson, 128 Merton Hall Road, Wimbledon, London SW19 3PZ. See you there!

More Wow!

Wow has released a further two GAC games – *Merlin* (a two-part text adventure from Michael Hunt) and *Beyond the Dark Mirror* (a text adventure from RCD enterprises).

Merlin costs £3 on tape and £5 on disk, while *Beyond the Dark Mirror* costs £2 on tape and £4 on disk.

New Adventure fanzine preview

Plans are afoot for a new adventure fanzine dedicated to the CPC range of machines! Called *The Brass Lamp*, the first issue is now available and costs only £1.

Contributors include Debby Howard and Dave Havard and although the Balg has yet to see the first issue, it sounds quite impressive. The Balg has also 'persuaded' the editor, Paul Hunniset, to offer the first issue to Balrog readers at half the normal price (50p, for the slower readers out there!).

Brass Lamp is available from Paul at: 167 Garden Wood Road, East Grinstead, West Sussex RH19. Tel: 0342 322318.

Guild Info

Tony Collins, from Guild Adventure Software, has been in touch about Guild's growing Amstrad adventure collection – it now has 46 games by 21 authors (including the likes of Ken Bond HBalg, Tony Kingsmill, Charles Sharpe and Paul Gill), along with six compilations.

Tony is at this moment converting many of the CPM+ games to run on CPM 2.2 and has many Spectrum conversions planned, including *Treasure Island, Captain Kook, Corya* and many more. For more details, write to Tony at: 760 Tyburn Road, Edington, Birmingham B24 9NX or phone 021 749 2585. I'll review some of Guild's games soon but I advise to write off for a catalogue as they have a very impressive list of software.

Type-ins

AA's BASIC boffin JERRY GLENWRIGHT presents four more readers' programs PLUS his ongoing BASIC tutorial...

Disc Nurse

Messing around with floppy disks can certainly make me sick at times! If you feel them same, hack *Disc Nurse* into your machine and all the those floppy problems will be over.

John Adamson of Dunfermiline's little disc utility enables you to manipulate discs to easily and without remembering complex commands.

The program's menu driven and allows you to catalogue discs, erase files, display ASCII files, rename and unerase files and format floppies. Have fun...

```
{MnAk} 10 GOTO 60
{ImEo} 20 DATA 1) Log In Disc,2) Display
       Different User/Drive,3) Erase File,4)
       Unerase File,5) Rename File,6) Display
       File (A.S.C.I.I Only),7) Format Disc
{JoBn} 30 KEY 139,"mode 2:list 1-4999"+CHR$(13)
{HkCs} 40 DIM k(200):z=0:y=0:n$="":n=0:DIM
       nme$(50):DIM letter(1000):DIM word$(50)
{HvAm} 50 RETURN
{FmAr} 60 MODE 2:GOSUB 20
{LpBw} 70 WINDOW #1,2,39,4,22:WINDOW
       #2,41,79,4,16:WINDOW #3,41,79,18,22
{AuBo} 80 PAPER #1,1:PAPER #2,1:PAPER
       #3,1:PAPER #4,1
{FqAt} 90 FOR a=1 TO 3:CLS #a:NEXT
{DpBo} 100 PRINT"
       Amstrad CPC Disc Nurse V1.1
       "
{AlCn} 110 LOCATE 1,25:PRINT"
       by John Adamson - For Amstrad Action  "
{MwBr} 120 PEN #1,2:CLS #1:PRINT #1:PRINT #1,"
       MENU"
{FqBp} 130 PEN #2,2:CLS #2:PRINT #2:PRINT #2,"
       DATA OUTPUT"
{GvBr} 140 PEN #3,2:CLS #3:PRINT #3:PRINT #3,"
       INSTRUCTIONS"
{PiAm} 150 RESTORE
{OoAr} 160 FOR counter=1 TO 7
{FtBm} 170 READ menu$:PRINT #1:PRINT
       #1,menu$:NEXT
{CqBj} 180 k$=INKEY$:IF k$="" THEN 180
{BrBk} 190 k=VAL(k$):IF k<1 OR k>7 THEN GOTO
       180
{GuBl} 200 ON k GOTO
       980,1190,1100,430,700,520,250
{GkAl} 210 END
{JxAj} 220 '
{DmAp} 230 'Format Disc
{CnAj} 240 '
{LnCj} 250 PRINT #3:LOCATE #3,1,4:PRINT #3,"
       [V]endor or [D]ata only Format"
{KwBi} 260 k$=INKEY$:IF k$="" THEN 260
{GxBo} 270 IF LOWER$(k$)="v" THEN b=&41 ELSE
       b=&C1
{EwAn} 280 c=&8035
{HwAn} 290 FOR a=1 TO 9
{OtBp} 300 POKE c,0:POKE c+1,0:POKE c+2,b:POKE
       c+3,2
{DwBn} 310 c=c+4:b=b+2:IF (b AND &F)=&B THEN
       y=y-9
{DqAk} 320 NEXT
{EqBx} 330 LOCATE #3,1,4:PRINT #3,"   Insert
       disc & Press any key  "
{JlAp} 340 CALL &BB18
{MnBn} 350 CALL &8000:CLEAR:GOSUB 20:GOTO 120
{AkAk} 360 '
{MnAv} 370 'Protected Basic De-protector
{OsAi} 380 '
{LuBq} 390 'POKE &AC03,&C0:POKE &AC02,&90:POKE
       &AC01,&C3
{HtAj} 400 '
{GsAn} 410 'File Uneraser
{MnAi} 420 '
{BuAq} 430 POKE &A701,229
{EnCm} 440 LOCATE #3,1,4:INPUT #3,"Enter name
       of the file to be un-erased";erased$
{FwBq} 450 IF erased$="" THEN POKE &A701,0:GOTO
       430
{IlAt} 460 newfile$="0:"+erased$
{FwAx} 470 |REN,@newfile$,@erased$
{JoCw} 480 POKE &A701,0:CLS #3:CLEAR:GOSUB
       20:CLS #3:PRINT #3:PRINT #3,"
       INSTRUCTIONS":GOTO 180
{MqAj} 490 '
{GnAs} 500 'Display A.S.C.I.I File
{AkAj} 510 '
{DoBp} 520 LOCATE #3,1,4:INPUT #3,">Enter Name
       Of File";fle$
{FvAl} 530 CLS
{EkBr} 540 LOCATE 70,23:PRINT "<Press any key
       to Pause>"
{IpAn} 550 OPENIN fle$
{InAr} 560 WINDOW 1,80,1,20
{EuAq} 570 WHILE NOT EOF
{PuAv} 580 LINE INPUT #9,a$:PRINT #2,a$
{OlBn} 590 k$=INKEY$:IF k$<>"" THEN 600 ELSE
       610
{AwBo} 600 k$=INKEY$:IF k$<>"" THEN 610 ELSE
       600
{IoAk} 610 WEND
{DlAo} 620 CLOSEIN
{MpBj} 630 k$=INKEY$:IF k$<>"" THEN 630
{AjBx} 640 LOCATE #3,1,4:PRINT #3,"      <Press
       Any Key To Continue> "
{GlBk} 650 k$=INKEY$:IF k$<>"" THEN 650
{MjBo} 660 CALL &BB18:CLEAR:GOSUB 20:GOTO 120
{IwAj} 670 '
{EoAn} 680 'Rename File
{JuAi} 690 '
{EtBp} 700 LOCATE #3,1,4:INPUT #3,"  Old Name
       Of File";oldfle$
{FiBr} 710 LOCATE #3,1,4:INPUT #3,"  New Name
       Of File";newfle$
{NmBm} 720 LOCATE #3,1,4:PRINT #3,"
       Processing...   "
{FlAt} 730 IF newfle$="" THEN 760
{BjAv} 740 IF oldfle$="" THEN 760
{KsAt} 750 |REN,@newfle$,@oldfle$
{GoBx} 760 LOCATE #3,1,4:PRINT #3,"      <Press
       Any Key To Continue> "
```

BASIC TUTORIAL... BASIC TUTORIAL... BASIC TUTORIAL...

That string counting code's really beginning to look like something, isn't it? Not only is the questioning process automated, but we've also got some error checking to weed out the idiots. And although the code's useless as far as the real world's concerned – when do you ever need to count strings? Right! – it does illustrate some of the principles behind just about every program you're liable to encounter.

There's a beginning and an end containing a loop, input and output, variables and the important error checking already mentioned, and those are the building blocks around which all your future programs will be created. And now before we expand the program further, let's just examine the loop possibilities for automated input without a definable end. That is, the situations when you need to use a loop, but don't know how many times to perform it (remember that it isn't good practise to jump out of a FOR...NEXT loop).

You could, of course, use the FOR...NEXT construction but with a variable, like this:

```
10 REM This is a program to count the
characters in a string
20 INPUT "How many strings would you like to
process"; LCNT
30 FOR CNT=1 to LCNT
40 A$=""
50 INPUT "Please type a string"; A$
```

and so on. This time, instead of providing a predefined counter for the loop, line 20 prompts the user.

```
<AxBk> 770 k$=INKEY$:IF k$<>"" THEN 770
<IkCs> 780 CALL &BB18:CLEAR:GOSUB 20:CLS
       #3:PRINT #3:PRINT #3,"
       INSTRUCTIONS":GOTO 180
<IoAj> 790 '
<IlBj> 800 'Sub-routine read directory
<CqAk> 810 '
<JmAn> 820 addr=&9CDE
<HwAk> 830 a=0
<MtAm> 840 a=a+1
<BsAv> 850 letter(a)=PEEK(addr+a)
<AtBw> 860 IF letter(a)<32 OR letter(a)>128
       THEN letter(a)=32
<NmBj> 870 word$(b)=word$(b)+CHR$(letter(a))
<AuBu> 880 IF LEN(word$(b))=8 THEN
       word$(b)=word$(b)+"."
<HqBl> 890 IF LEN(word$(b))=15 THEN b=b+1
<BxBn> 900 IF letter(a)=32 THEN c=c+1 ELSE c=0
<IrBl> 910 'PRINT #2,letter(a)"  "c"  "a"
       "word$(b)
<IxAs> 920 IF c=8 THEN 940
<AjAn> 930 GOTO 840
<NrAn> 940 RETURN
<PkAi> 950 '
<KpAn> 960 'log disc
<CoAj> 970 '
<KqBl> 980 CLS #2:PRINT #2:PRINT #2,"
       DATA OUTPUT"
<LvBn> 990 WINDOW 1,1,1,1:CAT:WINDOW
       1,80,1,25:GOSUB 820
<KnAm> 1000 PRINT #2
<OtAq> 1010 FOR a=0 TO b STEP 2
<IrBm> 1020 PRINT #2,"  "word$(a)"
       "word$(a+1):NEXT
<NlBx> 1030 LOCATE #3,1,4:PRINT #3,"
       <Press Any Key To Continue> "
<DtBm> 1040 k$=INKEY$:IF k$<>"" THEN 1040
<EjAo> 1050 a=0:b=0:c=0
<DkCt> 1060 CALL &BB18:CLEAR:GOSUB 20:CLS
       #3:PRINT #3:PRINT #3,"
       INSTRUCTIONS":GOTO 180
<AxAk> 1070 '
<OmAo> 1080 'Erase File
<DjAk> 1090 '
<NtBx> 1100 LOCATE #3,1,4:INPUT #3,">Enter Name
       Of File To Be Erased        ";fle$
<FsAv> 1110 IF fle$="" THEN 1130
<BkAo> 1120 |ERA,@fle$
<BtCi> 1130 LOCATE #3,1,4:PRINT #3,"
       <Press Any Key To Continue> "
<AxBl> 1140 k$=INKEY$:IF k$<>"" THEN 1140
<AvCt> 1150 CALL &BB18:CLEAR:GOSUB 20:CLS
       #3:PRINT #3:PRINT #3,"
       INSTRUCTIONS":GOTO 180
<HuAj> 1160 '
<AxAx> 1170 'Display Different User/Drive
<MkAj> 1180 '
<ElBp> 1190 LOCATE #3,1,4:INPUT #3,">Please
       Enter Drive";dr$
<CnBp> 1200 LOCATE #3,1,4:INPUT #3,">Please
       Enter User Number";us
<HjAu> 1210 |DRIVE,@dr$:|USER,us
<GiBp> 1220 PEN #2,2:CLS #2:PRINT #2:PRINT #2,"
       DATA OUTPUT"
<HtAm> 1230 GOTO 980
```

Ships

Based on the old favourite *Battleships*, Graham Smith of Street in Somerset has enlarged on the old theme to provide a fun game that requires skill and forethought if you're to outwit your opponent.

Graham has made use of the entire screen to provide a play area stuffed with ships (they look like Tie-fighters...). Both joystick ports are used for player movement and guess selection, or player two can use the keyboard if you only have one joystick. There are a total of 15 ships lurking somewhere on that screen – happy hunting!

```
<CtAt> 1 ' Ships by Graham Smith
<FiAt> 2 ' Player 1 use joystick
<EjBi> 3 ' Player 2 use joystick 1 or keys:-
<LxBk> 4 ' 6=up 5=down R=left T=right G=fire
<FuAj> 5 '
<AuBi> 10 p=&7FE0:pp=p:MEMORY p-1:MODE 1
<FoBj> 20 FOR j=72 TO 105:y=0:FOR k=0 TO 7
<MtAx> 30 READ a$:x=VAL("&"+a$):POKE p,x
<GuAu> 40 y=y+x:p=p+1:NEXT k:READ a$
<PxAs> 50 IF VAL("&"+a$)=y GOTO 70
<IvAw> 60 PRINT"Data error line";j*10
<HmBj> 70 NEXT j:p=pp:ENV 1,1,0,15,15,-1,5
<KnAv> 80 CALL &8000:ENT 1,4,1,1,4,-1,1
<NlBk> 90 DIM x(14),y(14),z(14):BORDER 2
<HmAx> 100 d=&E438:f=&8800:m=&808F:q=&8034
<AqAx> 110 INK 0,0:INK 1,15:INK 2,6:INK 3,2
<CrBi> 120 RANDOMIZE TIME:WINDOW 1,40,1,2
<NqBj> 130 WINDOW#1,1,40,3,25:g=1:PAPER 3
<NtAr> 140 CLS:PAPER#1,0:CLS#1
<ApBk> 150 x(0)=74*RND(1):y(0)=169*RND(1)
<HmAv> 160 g=3-g:z(0)=3:FOR j=1 TO 14
<IxBi> 170 x(j)=74*RND(1):y(j)=169*RND(1)
<PvAv> 180 dd=d:h=0:FOR k=0 TO j-1
<LlAu> 190 IF x(j)-x(k)>7 GOTO 240
<IpAv> 200 IF x(k)-x(j)>7 GOTO 240
<LjAt> 210 IF y(j)-y(k)>16 GOTO 240
<EwAu> 220 IF y(k)-y(j)>16 GOTO 240
<CmAo> 230 h=1:k=j-1
<PtAq> 240 NEXT k:IF h=1 GOTO 170
<FnBi> 250 z(j)=INT(RND(1)*2)*2+3:NEXT j
<ErBl> 260 FOR j=f TO &8810:POKE j,0:NEXT
<MlAu> 270 s=15:h=g:p(0)=0:p(1)=0
<ExAo> 280 GOSUB 690:h=3-h
<MoAv> 290 u=40:v=92:LOCATE 15,2:PEN 2
<JnBi> 300 PRINT"PLAYER";h;CHR$(8);"'S GO"
<MkBj> 310 x=u:y=v:GOSUB 670:CALL &BD19
<ErAw> 320 CALL p,d,f:CALL &806C,0,c
<LtAu> 330 CALL &BD19:CALL q,c,m
<BmAw> 340 j=JOY(h-1):IF j=0 GOTO 340
<DqAs> 350 IF j>15 GOTO 430
<FiAr> 360 a$=BIN$(j,4):d=c
<CiBl> 370 IF RIGHT$(a$,1)="1" THEN v=v-4
<FnBj> 380 IF LEFT$(a$,1)="1" THEN u=u+1
<NrBk> 390 IF MID$(a$,2,1)="1" THEN u=u-1
<EqBi> 400 IF MID$(a$,3,1)="1" THEN v=v+4
<OnAq> 410 u=u-(u=-1)+(u=79)
<KwBi> 420 v=v-(v=-4)*4+(v=180)*4:GOTO 310
<GvAp> 430 SOUND 2,44,22
<EiAw> 440 CALL p,c,f:CALL q,c,&809B
<JqBj> 450 n=0:FOR j=0 TO 14:x=INT(x(j))
<DrAx> 460 y=INT(y(j)):IF z(j)=0 GOTO 500
<OjAw> 470 IF x-u>1 OR u-x>6 GOTO 500
<GlAu> 480 IF y-v>5 OR v-y>15 GOTO 500
<PoAp> 490 h(n)=j:n=n+1
<MwAr> 500 NEXT j:CALL p,c,f
<EuAs> 510 d=dd:IF n>0 GOTO 540
<GxAq> 520 CALL q,c,&80A6
<NjAv> 530 CALL &806C,0,d:GOTO 280
<BoBi> 540 SOUND 7,55,99,15,1,1,31
<KlBi> 550 FOR j=1 TO n:r=h(j-1):x=INT(x(r))
<BjAx> 560 y=INT(y(r)):GOSUB 670:s=s-1
<AkAu> 570 p(h-1)=p(h-1)+z(r)
<BsBj> 580 z=&80B2:IF z(r)=3 THEN z=&8122
<HsAx> 590 z(r)=0:CALL &803C,c,z:NEXT j
<LkAw> 600 CALL &806C,0,dd:IF s>0 GOTO 280
<FnAp> 610 GOSUB 690:PEN 0
<IvBj> 620 LOCATE 15,2:PRINT"ANOTHER GAME?"
<FjAw> 630 a$=INKEY$:IF a$="" GOTO 630
<FjAw> 640 IF UPPER$(a$)="Y" GOTO 140
<DpBi> 650 IF UPPER$(a$)<>"N" GOTO 630
<CxAm> 660 CALL 0
<DiAs> 670 a=INT(y/8):b=y-8*a
<HpAx> 680 c=&C0A0+&50*a+&800*b+x:RETURN
<CkAs> 690 PEN 1:LOCATE 1,1
<JiBj> 700 PRINT"PLAYER 1 ";p(0):LOCATE 16,1
<PpBk> 710 PRINT"PLAYER 2 ";p(1):LOCATE 31,1
<IoAr> 720 PRINT"SHIPS ";s:RETURN
<BkBk> 730 DATA cd,27,80,0e,06,d5,06,02,265
<EpBi> 740 DATA ed,a0,0c,10,fb,d1,7a,c6,4b5
<OqBj> 750 DATA 08,57,30,08,7b,c6,50,5f,287
<DsBi> 760 DATA 7a,ce,c0,57,0d,20,e6,c9,43b
<FiBj> 770 DATA 06,08,11,ea,80,21,e3,80,30d
<PnAv> 780 DATA c5,01,07,00,ed,b0,af,d5,3ee
<DlBj> 790 DATA 11,0e,00,ed,52,d1,c1,10,300
<GuBk> 800 DATA ef,06,70,21,b2,80,7e,e6,41c
```

ORIAL... BASIC TUTORIAL... BASIC TUTORIAL...

OK, so FOR...NEXT with a variable is all very well, it'll work, but it's messy and there's still the problem of quitting the loop – if we want to stop prematurely, we can't, at least not without breaking the cardinal loop rule.

Fortunately, good old BASIC comes to the rescue with a neat little looping solution which does everything FOR...NEXT does while allowing us to escape whenever we wish. It's known as the WHILE loop, and here's how it goes:

WHILE (argument or expression) = true then continue to loop

What's that? How can a mathematical or logical argument be 'true'? Well, without getting into a lot of Boolean algebraic stuff and nonsense (lookup George Boole in a school text book if you realy want to know, or else wait for future installments...) what we mean is while it's still valid. Here's an example using our previous code:

```
10 REM This is a program to count the
characters in a string
20 ANS$="Y"
30 WHILE ANS$="Y"
40 A$=""
50 INPUT "Please type a string"' A$
60 IF A$="" THEN 50
70 IF ASC(A$)<65 OR ASC(A$)>122 THEN PRINT
"Invalid input. Try again\": GOTO 40
80 PRINT "The string '"A$"' is "LEN (A$)
"characters long."
```

No more dots!

We've decided to drop the dots (which indicated spaces) because too many people were getting confused by them. We're still using *Type-Righter*, though. This is the program that prints codes on-screen as you type a line of BASIC. All you have to do is check this code against the one printed in the magazine to make sure you've typed the line correctly. We print *Type-Righter* now and again, so if you haven't got a copy yet, look out for it soon. If you don't have *Type-Righer*, just ignore the codes in the curly brackets at the start of each line.

```
{CtBk} 810 DATA f0,12,13,23,10,f8,c9,dd,3e6
{DuBi} 820 DATA 6e,00,dd,66,01,dd,5e,02,2ef
{EkBk} 830 DATA dd,56,03,c9,cd,27,00,01,374
{FjBl} 840 DATA 06,02,18,06,cd,27,00,01,19b
{GuBj} 850 DATA 10,07,78,32,48,00,d5,06,264
{HtAv} 860 DATA 02,7e,0f,0f,0f,0f,b6,2f,1a1
{MnBi} 870 DATA eb,a6,eb,b6,12,13,23,10,38a
{PqBj} 880 DATA f0,d1,7a,c6,08,57,30,08,398
{NrBj} 890 DATA 7b,c6,50,5f,7a,ce,c0,57,44f
{FpBj} 900 DATA 0d,20,db,c9,cd,27,00,0e,353
{ExBk} 910 DATA 06,11,00,88,e5,06,02,ed,279
{BwBm} 920 DATA a0,0c,10,fb,e1,7c,c6,08,3e2
{IuBj} 930 DATA 67,30,08,7d,c6,50,6f,7c,31d
{NkAv} 940 DATA ce,c0,67,0d,20,e6,c9,30,401
{IoAv} 950 DATA 00,30,00,c0,c0,c0,c0,30,360
{DjAw} 960 DATA 00,30,00,03,00,07,08,0f,51
{FwBi} 970 DATA 0c,0f,0c,07,08,03,00,00,39
{DxAv} 980 DATA 00,00,03,00,03,00,00,00,6
{LrAw} 990 DATA 00,00,11,cc,00,00,00,33,110
{IuAx} 1000 DATA 88,11,cc,00,00,00,33,88,220
{PrBj} 1010 DATA 33,88,00,ff,00,11,cc,33,2ca
{ImBk} 1020 DATA 88,11,ff,88,11,cc,77,00,374
{KnBi} 1030 DATA 33,ff,cc,00,ee,77,00,77,3da
{CvBj} 1040 DATA 99,ee,00,ee,ff,ff,ff,00,572
{EkAw} 1050 DATA ff,ff,ff,ff,ff,ee,00,77,660
{MlAw} 1060 DATA ff,ff,00,00,00,00,00,00,1fe
```

RSX Speech

Here's an incredible piece of clever coding. Neil Hopkinson of Fareham, Hampshire has worked out a method of enabling your CPC to digitise speech and music played via the cassette port by grabbing it directly from the machine's memory! Sounds complicated? Fortunately, the software does all the work for you, so all you have to do is select your favourite band strutting their stuff, or your favourite politicians strutting theirs (!), press play, and the machine does the rest. You can save digitised samples to disk, load and play them and alter the volume.

```
{LqAi} 10 '
{IiAq} 20 ' RSX Speech System
{EpAt} 30 ' By Neil Andrew Hopkinson
{DtAn} 40 ' February '92
{HuAi} 50 '
{MxBs} 60 MODE 1:BORDER 0:INK 0,0:INK 1,2:INK
       2,24:INK 3,24
{NiAo} 70 MEMORY 9999
{IwAr} 80 GOSUB 640:CALL 39000
{CmBm} 90 PRINT
       CHR$(22)+CHR$(1)+CHR$(23)+CHR$(3)
{OmAj} 100 TAG
{FiAw} 110 RESTORE 120:GOSUB 560
{AvDl} 120 DATA 190,320,"RSX SPEECH
       SYSTEM",120,260,"WRITTEN BY NEIL
       HOPKINSON",170,200,"INSTRUCTIONS (Y/N)
       ?",0,0,"RSX"
{AtAm} 130 a$=""
{BkAp} 140 WHILE a$=""
{IkAs} 150 a$=UPPER$(INKEY$)
{HoAk} 160 WEND
{CuAv} 170 IF a$="N" THEN 540
{NtAk} 180 CLG
{KvAu} 190 RESTORE 200:GOSUB 560
{GtGl} 200 DATA 190,380,"RSX SPEECH
       SYSTEM",5,340,"About the
       program:",5,320,"The RSX speech system
       allows you to",5,300,"play speech - or
       music - into the",5,280,"computer via
       the built in tape recorder."
{GsFu} 210 DATA 5,240,"This recorded sound can
       then be played",5,220,"back again by
       using the CPC sound chip.",5,180,"The
       recorded sound can also be
       slowed",5,160,"or quickened to produce
       wierd results!"
{JxFr} 220 DATA 5,120,"Sound effects can also
       be produced by",5,100,"taking out small
       portions of speech.",5,60,"On the
       following screens are
       the",5,40,"commands and how to use
       them.",0,0,"RSX"
{KsAv} 230 RESTORE 310:GOSUB 560
{GuAv} 240 WHILE INKEY$<>CHR$(13):WEND
{PvAu} 250 ORIGIN 0,0,0,640,360,0:CLG
{IlAv} 260 RESTORE 270:GOSUB 560
{FiEu} 270 DATA 190,380,"RSX SPEECH
       SYSTEM",5,340,"Commands:",0,320,"|ON
       This turns the tape recorder
       on.",0,300,"|OFF   This turns the tape
       recorder off."
{PrDx} 280 DATA
       0,260,"|RECORD,[start],[length]",0,220,"
       This command records anything that
       is",0,200,"playing through the CPC tape
       recorder."
{NwCm} 290 DATA 0,180,"For best results the
       sound should be",0,160,"quite loud."
{NnFm} 300 DATA 0,120,"[start]  = Address to
       store speech",0,100,"[length] = Length
       of speech",0,60,"Make sure you don't
       record over the",0,40,"RSX speech system
       !"
{AlAw} 310 DATA 0,20,"
{HrAv} 320 WHILE INKEY$<>CHR$(13):WEND
{JnAv} 330 ORIGIN 0,0,0,640,322,0:CLG
{DkAv} 340 RESTORE 350:GOSUB 560
{KmDv} 350 DATA
       0,320,"|SPEECH,[start],[length]",0,280,"
       This plays the speech back to you
       !",0,220,"[start]  = Address of speech"
{IjEm} 360 DATA 0,200,"[length] = Length of
       speech",0,160,"Please note that this
       command turns the",0,140,"tape recorder
       off.",0,0,"RSX"
{DwAv} 370 RESTORE 310:GOSUB 560
{DjAv} 380 WHILE INKEY$<>CHR$(13):WEND
{EjAl} 390 CLG
{InAu} 400 RESTORE 410:GOSUB 560
{MuFl} 410 DATA 0,320,"|SPEED,[speed of
       record/playback]",0,280,"This command
       allows you to alter the",0,260,"record
       and playback speed.",0,220,"[speed] can
       be between 1-255"
{IiHi} 420 DATA 0,180,"The fastest speed is 1
       and it also",0,160,"gives the clearest
       speech, but it only",0,140,"allows a
       short recording.",0,120,"A slow
       speed,such as 20,means that
       you",0,100,"can do far larger recordings
       but the"
{GxEm} 430 DATA 0,80,"speech will not be as
       clear.",0,60,"By altering the speed, you
       can play",0,40,"your speech back at
       different speeds!",0,0,"RSX"
{FpAw} 440 RESTORE 310:GOSUB 560
{HtAw} 450 WHILE INKEY$<>CHR$(13):WEND
{LuAk} 460 CLG
{CtAv} 470 RESTORE 480:GOSUB 560
{GoDo} 480 DATA
       0,320,"|VOLUME,[volume]",0,280,"This
       alters the volume of playback",0,260,"0
       for quiet and 15 for very loud !"
{HmEm} 490 DATA 0,220,"To use in your own
       programs:",0,180,"Load the RSX speech
       system at address",0,160,"39000 and type
       CALL 39000 to turn it on"
```

BASIC TUTORIAL... BASIC TUTORIAL... BASIC T

```
90 ANS$="":INPUT "Process strings (Y/N)"; ANS$
100 WEND
110 END
```

Here's what's happening. The program says while our condition is still true, process loops. When the condition stops being true, stop processing. Line 20 merely sets up a variable for a prompt and the condition for the WHILE loop. That is, ANS$ is our answer to the question, do we want to process strings? We set this to Y for yes intially (obviously we want to process at least one string otherwise we wouldn't have bothered to run the program.

That might not always be true though, and we could use WHILE without a precondition and either enter the loop or not depending upon some other test – don't worry, it'll become clearer later...).

The rest of the code until line 90 is exactly the same as that used in the FOR...NEXT loop. We pass through this code, inputing a string, testing it for errors, counting it and printing the results then reach line 90. Now, do we want to continue? If yes, then WHILE ANS$="Y" in line 30 is true, the loop skips back to line 40 and we process another string. Answer in the negative, however, and line 100, WEND, is encountered. WEND simply means While END, and does just that, ends the WHILE loop. Line 110 ends the program.

And there we have it. A loop which will perform iterations automatically (in this case, semi-automatically) and one which we can break out of at any point if the loop condition is no longer true.

Normally, the WHILE loop condition wouldn't rely

```
(MuCx) 500 DATA 0,120,"The RSX speech system
       begins at 39000",0,100,"and is 300 bytes
       long",0,60,"Enjoy !"
(EmAo) 510 DATA 0,0,"RSX"
(KiAv) 520 RESTORE 310:GOSUB 560
(PnAv) 530 WHILE INKEY$()CHR$(13):WEND
(AwBi) 540 TAGOFF:PRINT CHR$(22);CHR$(0):CLS
(OiAk) 550 END
(LiAj) 560 '
(JtAp) 570 ' 3D Leterring
(FuAj) 580 '
(HsAq) 590 READ x%,y%,z$
(BiBi) 600 IF z$="RSX" THEN RETURN
(MqAm) 610 GOSUB 630
(PvAm) 620 GOTO 590
(JpCq) 630 PLOT 500,500,1:MOVE x%,y%:PRINT
       z$;:PLOT 500,500,2:MOVE x%+4,y%+3:PRINT
       z$;:RETURN
(PrAi) 640 '
(CxAs) 650 ' Read Machine Code
(ApAj) 660 '
(HvAq) 670 RESTORE 810
(GwAl) 680 ch=0
(LuAu) 690 FOR ad=39000 TO 39272 STEP 8
(EkAn) 700 READ z$
(NtAl) 710 c=1
(PpAq) 720 FOR a=ad TO ad+7
(CmAr) 730 a$=MID$(z$,c,2)
(CxAs) 740 POKE a,VAL("&"+a$)
(DtAt) 750 ch=ch+VAL("&"+a$)
(PxAl) 760 c=c+2
(LvAk) 770 NEXT a
(DvAl) 780 NEXT ad
(AsCk) 790 IF ch()33676 THEN PRINT "Oh dear !
       There's an error in the data!":STOP
(EiAn) 800 RETURN
(AlAw) 810 DATA 3E02323B993E0A32
(PlAt) 820 DATA 3A99213C99014099
(LtAs) 830 DATA C3D1BCF5DD7E0032
(NwAv) 840 DATA 3A99F1C9F5DD7E00
(OmAu) 850 DATA 323B99F1C9F50100
(AvAu) 860 DATA F63E10ED79F1C9F5
(MxAs) 870 DATA 0100F6AFED79F1C9
(AiAv) 880 DATA 3A3B9932DD98DD5E
(HqAr) 890 DATA 00DD5601DD6E02DD
(ClAu) 900 DATA 6603C3C0983A3B99
(CmAt) 910 DATA 320E993A3A9932F7
(BvAs) 920 DATA 98DD5E00DD5601DD
(JxAu) 930 DATA 6E02DD6603C3EB98
(IoAt) 940 DATA F30600C5AF0100F5
(HoAr) 950 DATA CBBEED78CB7F2002
(MjAq) 960 DATA CBFECB06060110FE
(EtAq) 970 DATA 00000000060110FE
(HrAt) 980 DATA C110E0231B7AB320
(OiAs) 990 DATA D8FBC9F33E090E0F
(CtAs) 1000 DATA CD1E990600C50E0A
(KpAt) 1010 DATA CB7E28020E003E09
(DtAu) 1020 DATA 06F4ED4906F64FF6
(MrAt) 1030 DATA 80ED79ED49060110
(IxAv) 1040 DATA FECB06C110DF231B
(NwAq) 1050 DATA 7AB320D7FBC906F4
(NoAv) 1060 DATA ED7906F6ED78F6C0
(OwAu) 1070 DATA ED79E63FED7906F4
(NwAt) 1080 DATA ED4906F64FF600ED
(AvAv) 1090 DATA 79C90A013A994099
(MoAt) 1100 DATA 5499C36B98C37498
(KvAr) 1110 DATA C37D98C38798C390
(OiAs) 1120 DATA 98C3A598564F4C55
(MvAt) 1130 DATA 4DC553504545C44F
(GiAt) 1140 DATA CE4F46C65245434F
(PtAt) 1150 DATA 52C45350454543C8
```

Tennis

No prizes for guessing what early video game *Tennis* is a '90s copy of! This version, programmed by Polys Pilavas, features both joystick and keyboard and speed control...

```
(AuCi) 10 MODE 1:y=10:INK 1,26:INK 0,0:PAPER
       0:PEN 1:BORDER 0:GOTO 390
(GjCj) 20 ORIGIN 0,0:MOVE 30,32:DRAWR
       0,335,1:MOVE 610,32:DRAWR
       0,335,1:m1=3:m2=3
(GqCs) 30 x(1)=9:x(2)=9:x$="
       "+STRING$(4,131)+"
       ":dx=1:dy=2:x=9:y=9:y$="
       "+STRING$(4,140)+"  "
(GuBo) 40 GOSUB 200:GOSUB 210:GOSUB 220:GOSUB
       230
(ImBq) 50 LOCATE x(1),2:PRINT y$:LOCATE
       x(2),24:PRINT x$
(GqAp) 60 xf=x+dx:yf=y+dy
(NxBm) 70 IF xf=38 OR xf=3 THEN dx=-dx:SOUND
       1,100
(PkAv) 80 IF yf=3 THEN GOSUB 480
(DlAu) 90 IF yf=23 THEN GOSUB 530
(PmAt) 120 LOCATE x,y:PRINT " "
(KsCl) 130 x=xf:y=yf:IF y(3 OR y)23 THEN FOR
       s=1 TO 9:CALL &BB18:NEXT:GOTO 390
(KtAx) 170 LOCATE xf,yf:PRINT CHR$(143)
(LnAl) 190 GOTO 40
(MuCm) 200 IF NOT INKEY(8) AND x(1))1 THEN
       x(1)=x(1)-2:RETURN ELSE RETURN
(FiCl) 210 IF NOT INKEY(74) AND x(2))1 THEN
       x(2)=x(2)-2:RETURN ELSE RETURN
(GiCl) 220 IF NOT INKEY(1) AND x(1)(33 THEN
       x(1)=x(1)+2:RETURN ELSE RETURN
(HuCo) 230 IF NOT INKEY(75) AND x(2)(33 THEN
       x(2)=x(2)+2:RETURN ELSE RETURN
(BkCr) 390 IF y(3 THEN pl2=pl2+1:y=10:GOTO 400
       ELSE IF y)23 THEN pl1=pl1+1:y=10:GOTO
       400
(BxFk) 400 CLS:PRINT:LOCATE 14,3:PEN 2:PRINT
       "Is it tennis?":PRINT:PEN 3:PRINT
       SPACE$(16)"By Polys":PRINT
       STRING$(40,"*"):PRINT:PRINT:PEN 1:PRINT
       SPACE$(14)"Player 1 ";pl1
(EvBk) 410 PRINT:PRINT SPACE$(14)"Player 2
       ";pl2
(MxBq) 430 PEN 3:PRINT:PRINT SPACE$(9)"Press R
       to reset score"
(PmBv) 440 PRINT:PRINT:PRINT SPACE$(9)"Press G
       for another game"
(DtBm) 450 IF NOT INKEY(50) THEN
       pl1=0:pl2=0:GOTO 400
(PxBq) 460 IF NOT INKEY(52) THEN CLS:CALL
       &BB18:PEN 2:GOTO 20
(CuAu) 470 CALL &BB18:GOTO 450
(HoBv) 480 IF x(1)+2=xf OR x(1)+5=xf THEN
       dy=4:SOUND 1,150
(KtBx) 490 IF x(1)+3=xf OR x(1)+4=xf THEN
       dy=2:SOUND 1,176
(DvCj) 500 IF x(1)+1=xf OR x(1)+6=xf THEN dx=-
       dx:dy=2:SOUND 1,200
(LxBp) 510 IF NOT INKEY(9) AND m2)0 THEN
       dy=5:m2=m2-1
(FrAn) 520 RETURN
(LqCi) 530 IF x(2)+2=xf OR x(2)+5=xf THEN dy=-
       4:SOUND 1,150
(FmBw) 540 IF x(2)+4=xf OR x(2)+3=xf THEN dy=-
       2:SOUND 1,176
(IiCk) 550 IF x(2)+1=xf OR x(2)+6=xf THEN dx=-
       dx:dy=-2:SOUND 1,200
(GxBq) 560 IF NOT INKEY(76) AND m1)0 THEN dy=-
       5:m1=m1-1
(ApAn) 570 RETURN
```

Win £20

It's true! – every *Type-In* we publish earns its author £20 – PROVIDED IT'S ALL YOUR OWN WORK! Send your programs to:

Type-Ins, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

And don't forget to enclose a stamped, self-addressed envelope if you want your cassette/disk back again.

N.B. Your programs have a much better chance of being accepted if (a) they are 4k or less and (b) they work on both 64k and 128k machines.

TORIAL... BASIC TUTORIAL... BASIC TUTORIAL...

on a direct input because that impairs the efficiency of the loop (in that situation, a simple GOTO would work almost as well), but we used it here to illustrate the point.

WHILE...WEND is a very powerful BASIC construct and one which few BASICs had until comparatively recently. Later in the series, we'll really put WHILE...WEND througn its paces, but for now, at least you've met it.

Now let's just finish this month's column with an explanation of something I've used a few times but haven't told you about (actually, I forgot!). Multiple statements – any idea what I mean?

Look at lines 70 and 90 in our code. See that colon? By using a colon, we can put several entirely separate BASIC statements together on one line without confusing the computer. Sometimes, this is simply to gain clarity or save time and effort typing lots of separate lines, but at other times, such as on line 70, the only way a particular construct will work is by using mutiple statements.

That final BASIC instruction on line 70 (GOTO 40) is only performed if the first statement on the line is true (is the user input invalid?) If that statement isn't true, then the rest of that line is skipped – without regard to the rest of the arguments it might contain – and processing continues on the next line.

If we'd put GOTO 40 on its own line following line 70, then we'd always jump back and prompt for input – nothing would ever be processed!

Experiment with multi-statement lines and the WHILE...WEND loop until next time. See you!

ADVERTISERS INDEX

Power Up

ACTION TEST pages 44-47 • ACTION REPLAY pages 48-49 • CHEAT MODE pages 51-54

A groovy new wrestling game, a budget compilation, some re-releases, LEMMINGS cheats, and a couple of new games from CodeMasters... welcome to POWER UP, AA's very own games department.



Adam Peters

Done anything exciting this month, Adam? "Well, I made contact with aliens." Er, that sounds quite exciting. What happened? "It was amazing. I was just idly strolling round the office when I happened to glance out of the window and saw the word 'Hello' high up in the sky. Having read a number of books on ufology I knew exactly what to do, and immediately strapped a TV ariel to my head and leant out of the window. I tried to engage the aliens in conversation, mind-speaking messages of friendship and fraternal greeting, but they didn't reply. I was so disappointed. It was only later that I discovered the gossip magazine lying on the table with its title reflected in the window. Oops."



Rod Lawton

Rod was in hospital when we caught up with him, with the whole of his body except his mouth and left knee enclosed in plaster. Oh dear Rod, what happened to you? "I fell out of the window. I'm usually very doubtful of Adam and his little schemes, but this alien contact thing was different. I've always been interested in outer space, and didn't want to pass by the opportunity to make contact with an alien race. Unfortunately I leant a bit too far out of the window when looking for their spaceship, and fell out of it. Oh well. Adam's still looking for aliens and he's promised to bring one with him when he next visits."

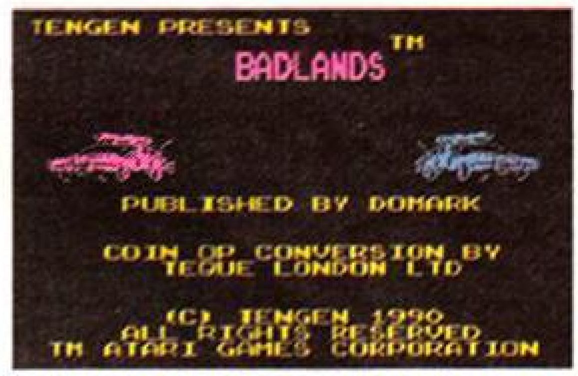
The hit parade

ELSPA PENGUIN CHARTS • COMPILED BY GALLUP

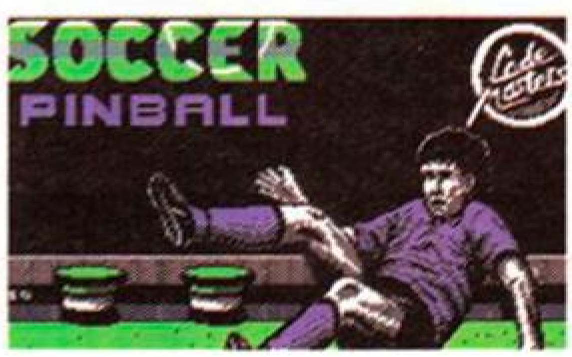
1 NEW ZEALAND STORY
Hit Squad • 76% (AA73)

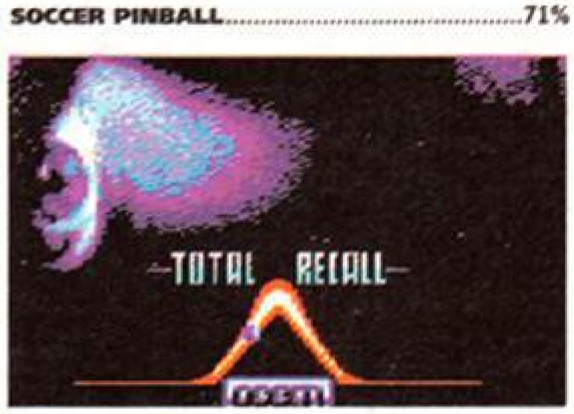
2 BUBBLE BOBBLE Hit Squad..................71% (AA74)
3 MAGICLAND DIZZY • C/Masters 85% (AA64)
4 RAINBOW ISLANDS • Hit Squad..89% (AA78)
5 DIZZY'S EX ADV • C/Masters.....74% (AA76)
6 QUATTRO COIN-OPS • Codies...Not reviewed
7 TOTAL RECALL • Hit Squad........90% (AA85)
8 BATMAN – MOVIE • Hit Squad....94% (AA74)
9 HYPERSPORTS • Hit Squad.........88% (AA4)
10 SHADOW WARRIORS • H Squad...65% (AA82)
11 DALEY THOMPSON • Hit Squad...81% (AA8)
12 GOLDEN AXE • Tronix 58% (AA75)
13 FANTASY WOR DIZZY • Codies ..89% (AA52)
14 DRAGON NINJA • Hit Squad 79% (AA79)
15 1ST DIV MANAGER • C/Masters.54% (AA83)
16 DIZZY PANIC • C/Masters 35% (AA76)
17 4 GAME PACK • Atlantis...........Not reviewed
18 TNT2 • Domark.........................34% (AA79)
19 ROBOCOP • Hit Squad................84% (AA78)
20 DIZZY COLL • C/Masters.........Not reviewed

Reviewed this month









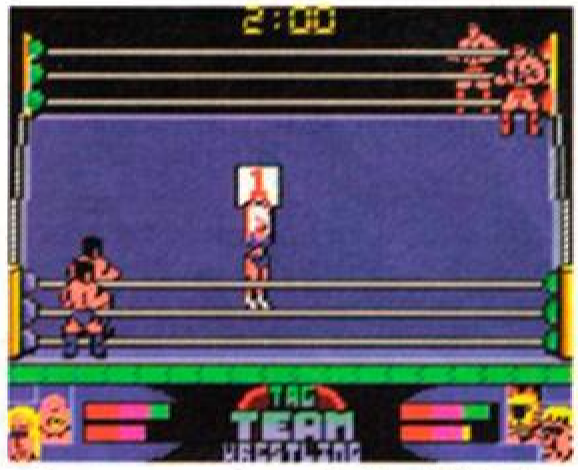


American tag team wrestling

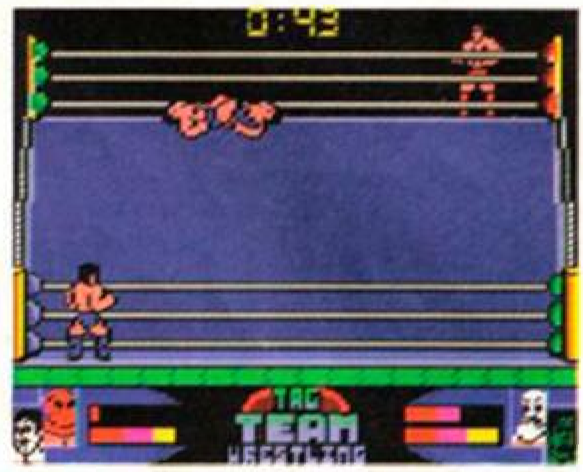
Zeppelin ▪ 091-385 7755 ▪ £3.99 cassette

Wrestling games are crap. There you are, I've said it. *Rock 'n' Wrestle* was crap, *WWF Wrestlemania* was crap, and *American Tag Team Wrestling* is crap. Forget the sport sim nonsense, wrestling games are just beat-em-ups where you can't go anywhere. Very poor – and I'll gladly go eight rounds with anyone who says otherwise.

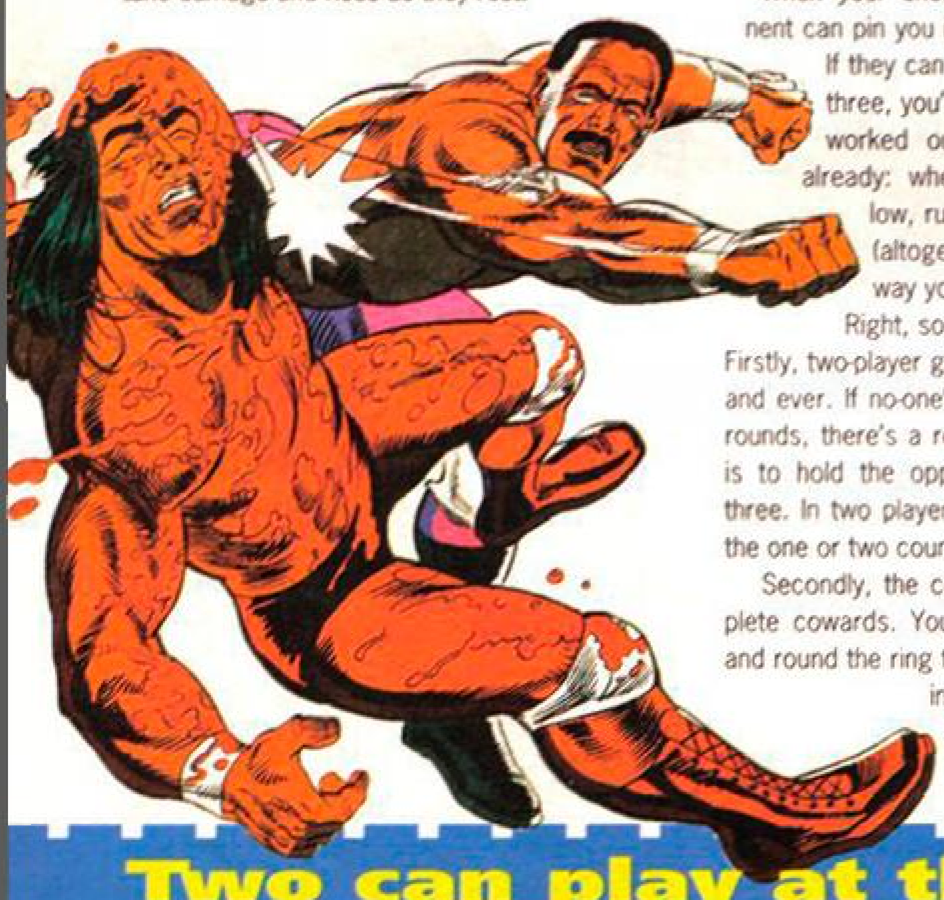
But a good game of a crap type is better than a crap game of a good type (*what? – ed*) so let's get constructive: *Tag Team Wrestling* puts you in control of a pair of reprobates in leotards, only one of which can be in the ring at any one time (none of that cheating two-against-one-when-the-ref's-back-is-turned nonsense here, folks). Each wrestler has an energy bar, which drops as they take damage and rises as they rest.



This woman wanders on to the pitch at the start of every round, waving a card about.



Oops. These two chaps have just run into each other. Gotta laff though, haven't you?

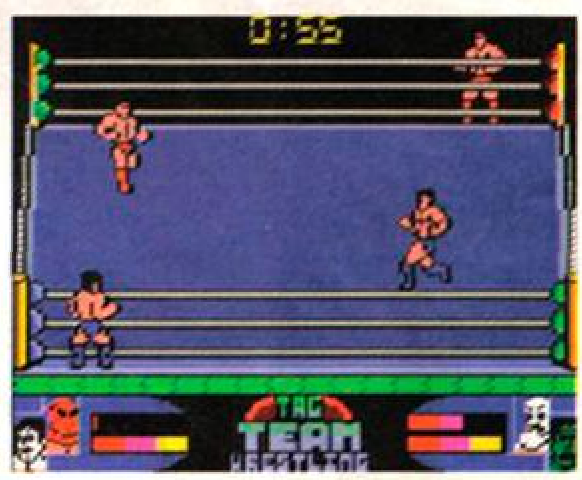


When your energy reaches zero, the opponent can pin you if you're knocked to the floor. If they can hold you down for a count of three, you're history. So you've probably worked out one of the main tactics already: when your chap's energy gets low, run to your corner to tag in his (altogether healthier) chum. That way you'll last longer.

Right, so what are the negative points? Firstly, two-player games go on for ever and ever and ever. If no-one's won after three two-minute rounds, there's a re-match. The only way to win is to hold the opponent down for a count of three. In two player games everyone gets up at the one or two count. So annoying!

Secondly, the computer opponents are complete cowards. You have to chase them round and round the ring to try and get a shot in. Stand in the middle and wait for the opponent to join you and you'll be waiting an awfully long time. He just zig-zags round the perimeter, keeping well out of your way. The yellow-bellied son of a porcupine's milk-maid.

OK, so what are the positive points? Well there's a nice range of fighting moves and the 'tag team' element does add something (but not much) to the usual wrestling gameplay. American

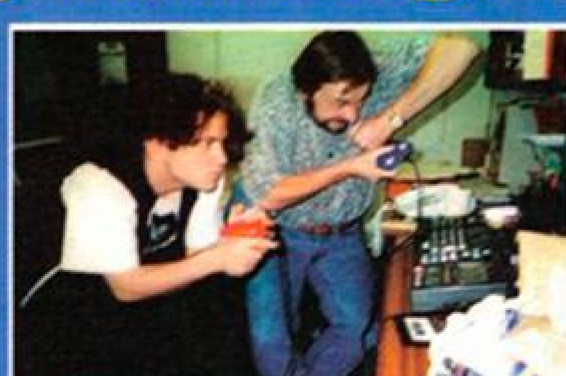


This running around is probably very good exercise, but it's not exactly wrestling is it?

Two can play at that game: Adam and



It started off so merrily. A fun game of Tag Team Wrestling to relax after a hard day's work. No-one was going to take it all that seriously, surely?



Wrong! These blokes take it all very seriously. See that concentration etched on their faces. This was the big contest to see who was the office wrestling champ.



Rod won and seemed very happy with his success. Adam was less happy. "You think you're the wrestling champ then, Rod?" "Yeah, I am. I'm the champ!"

ag
ling

Tag Team Wrestling is just about on a par with *WWF*, and it's a whole lot cheaper...

Games like this are loads more fun in two-player mode. Even though the contest drags on for ages before anyone wins, you'll have big fun beating and bashing your human opponent. Just don't take it too seriously, OK? And remember: wrestling games are crap.

Adam Peters

VERDICT

GRAPHICS — **73%**
Decent enough graphics. It's easy to easy what's going on, though the sprites are a bit blocky.

SONICS — **67%**
Typical computer noises. 'Dutsch' 'Pwuyuuu' 'Beeeee' 'Schhwu'. Do I need to spell it out?

GRAB FACTOR — **82%**
Wrestling is ultra pop at the moment, and *Tag Team* looks and plays as smooth as *WWF*.

STAYING POWER — **58%**
It soon gets very boring though. The two-player mode has potential, the solo mode will last a week.

AMERICAN TAG TEAM WRESTLING is a reasonable enough game. It's no long termer, but it's fun.

RATING 74%

Move that body

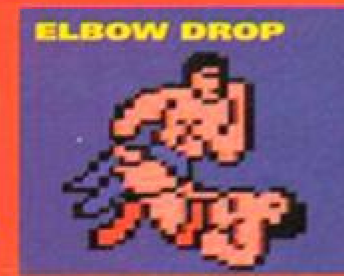
There are a number of different moves you can use to try and do in your opponent. Here's Knuckles (blue cosie) and Justin (in the red) modelling them for us...



Knuckles: The chop to the head is a good move. Sometimes it takes two or three before he go down, but down he go.
Justin: Yes, this one's quite painful. It really hurts the side of your head. There are a lot of far worse moves though.



Knuckles: Here I go, this is fun. Into the corner and onto the ropes, then off I jump. Look out below, Knuckles is coming!
Justin: Keep out of the way. It takes ages for a wrestler to get up on the ropes and only a fool would get caught out. (Thwack)



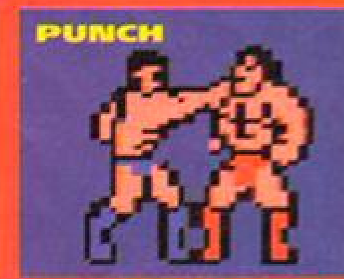
Knuckles: When opponent is floored by punch or kick, add to pain with elbow drop. Do two or three before they get up.
Justin: This just isn't on. You've been knocked to the ground, the one thing you don't need is an elbow in your stomach.



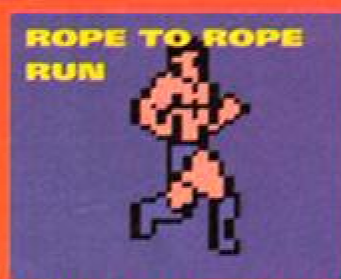
Knuckles: Need to be running fast between the ropes, then jump and kick. The biggest and hardest kick there is, it makes the biggest and hardest pain that is possible. Ha ha. Hurt them and hurt them good.
Justin: Oof.



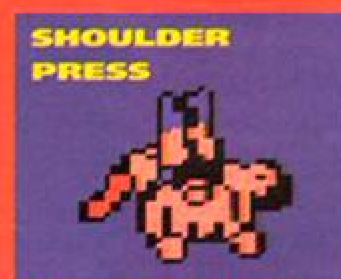
Knuckles: Simple kick to the ghoulies. Not special but it makes their eyes water.
Justin: They need to be very near to get a kick or punch in on you. Keep your distance and you've nothing to worry about. Well, a bit less to worry about.



Knuckles: Simple but good way to do damage. Punch in face once or twice and he go down like demolished chimney. Ug.
Justin: Why must we fight, Mr Knuckles? Why don't we just talk over our disagreements? It all seems a bit one-sided, too.



Knuckles: Run from one side of ring to the other, very fast. Run into enemy for pain or do flying kick for extra pain. I like it.
Justin: If your opponent tries this, go and sit in the corner. If you wait the runner might get really tired and keel over. But it's not really very likely.



Knuckles: When enemy tired, knock them over and lie on them. If referee can count up to three you are the winner and get the big belt.
Justin: You might be able to get up from this before the three count, or you might not. It seems pretty random.



Knuckles: Woooo...
Justin: Ha, stitch this Knuckles, you primate. Put you off guard with my 'not very good at fighting' routine, eh? A grab by the scruff of the neck, a hand to the arm and wham! It's victory to the man in the pleasant red Y-fronts. I thank you...

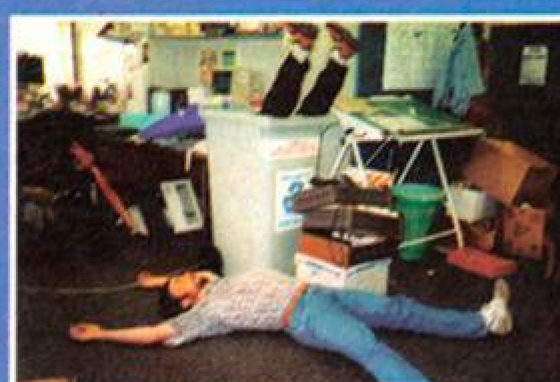
Rod have a go on TAG TEAM WRESTLING



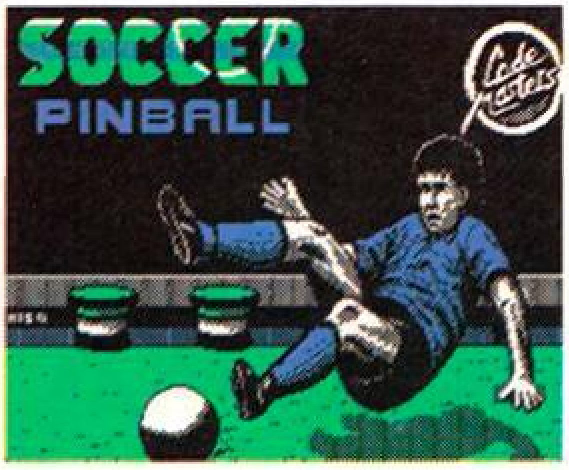
"Oh yeah?" Thwack! Things seem to be getting a little heated as Adam lands a punch on Rod's chin, knocking him out of his chair. "Come on then, wrestling champ!"



An angry Rod floors Adam with a drop kick and ankle lock. "Ow, get off," screams Adam (like a big girl). He grabs a chair and smacks Rod round the head with it.



Ten minutes of mindless violence later, Rod's out for the count and Adam's upside down in the wheelie bin. Conclusive proof that violent computer games screw you up.



Oof! Does CodeMasters fall flat on its backside with the daftest footie concept ever?

Pitching in

Cor, this don't look much like a football pitch, do it? And yet there are certain common features...



Soccer Pinball

CodeMasters ■ 0926 814132 ■ £3.99 cassette

Soccer what? Come on now, how can you have a game called *Soccer Pinball*? The two games have got absolutely *nothing* in common...

...Or have they? Sit down and play CodeMasters' little budget outing for a minute or so and you start to get the idea. It's actually like table football in a way. You use the flippers to try to score a goal (there's a little goalmouth half way up the table), which is a bit like flicking the levers in table football. Sort of.

And yes, well, pinball and football do use spherical objects which you're trying to propel in roughly the right direction... OK, we'll admit it. *Soccer Pinball* does make a funny sort of sense as a game.

In fact, it's really rather fun. It's also a bit difficult. If you want to get to the next round you have to score three goals – but first you have to knock the defenders out of the way. You've only got three balls to do it with and since the gap between the flippers at the bottom of the table is that fraction too wide, you keep losing the ball!

No, it's not at all frustrating, really it's not.

Get off Level One and you reach Level Two (not too surprising, that). Here it's more of the same, except that there are a few more defenders to get out of the way.

There is a two-player mode, but it's a bog-standard alternating play job – now if it was *simultaneous* two-player action, that would be interesting.

The graphics are pretty dull but nicely detailed mode 1 stuff, the ball moves nice and smoothly and the pinball effect is very convincing. There are just two basic problems, though. *Pinball Soccer* is too difficult for a game of chance. Yes, no doubt there are people who think that pinball is a test of skill, but there's not much evidence of it in this (*it might just be that you're rubbish, Rod – Adam*).

Secondly, it's a bit on the dull side. Well, a lot, really – unless you're mad on pinball in any form.

There's a third problem, too. Some fool is kicking footballs around this page, and when I find out who it is I'm going to give them the boot! (*Rod will shortly be appearing in pantomime in a Siberian salt mine – Adam*)

Rod Lawton



Level Two is just more of the same, but with more defenders to knock out of the way before you can score.



Oh no, you've let the ball get past you! The computer rubs it in by displaying a picture of your despairing goalie...

VERDICT

GRAPHICS — 70%
Not exactly riveting to look at, but pretty detailed and everything moves quite smoothly.

SONICS — 76%
Jolly bop-a-long title tune and all the usual boppy, twirly, jingly, beepy pinball sounds

GRAB FACTOR — 83%
Soccer Pinball grabs you harder than Vinnie Jones (but doesn't make your eyes water quite so much)

STAYING POWER — 55%
Well, to be honest – to be brutally honest – this is pretty pitiful once the novelty's worn off

SOCCER PINBALL sounds like a barmy idea for a game, but it's actually quite good fun. For a while.

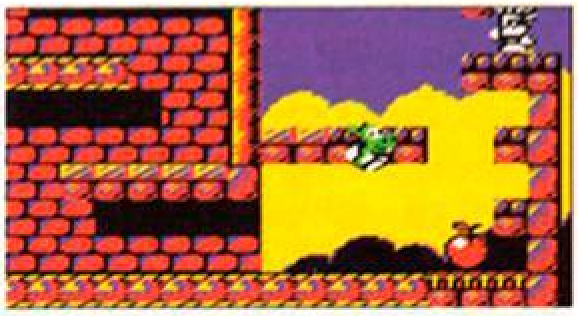
RATING 71%



The simplest way to jump is to push up, then left/right. The controls are a bit sluggish until you get used to them.



The creature with a face like an unzipped cushion is a split second away from having the stuffing blown out of him...



Get that apple! Every time you zap a monster it leaves some food behind. Don't tread on those arrows to the right, though.

DJ Puff's Volcanic Eruption

CodeMasters ▮ 0926 814132 ▮ £3.99 cassette

DJ Puff's Volcanic *Eruption*? What sort of title is that? It sounds like someone suffering from a gastric complaint!

However, the hero of our tale, Puff, is above such vulgarity. This little dragon bloke is so cute he will make you sick. Puff (who is now a DJ) has to recover his record collection from the evil Captain Krip (who's nicked it).

To do this you have to wipe out all Krip's nasty henchmen (and henchwhelks and henchblobs) by firing twirly things at them, lobbing bombs or breathing fire (depending on which bonus you've picked up).

The idea is to collect a whole load of records scattered around a platform maze. But between you and these rings is a whole range of nasty surprises. Some of these are in the form of blobby creatures that smile engagingly whilst trying to do you in. Some are giant whelks that occasionally throw out a mine. Others are scowling flat-tops who fire arrows. There's more, but that's enough to be getting on with...

...Especially since there are nasty things you mustn't land on (upward-pointing arrows in the ground and conveyor belts that try to take you where you really don't want to go). Oh, and don't fall in the water.

DJ Puff is nice and colourful, but it doesn't exactly move at the speed of light.



Those curly, fluffy things you fire at the nasties do actually kill them (eventually).

The little feller himself can go left and right, jump in the air and launch any special weapons.

You don't get any sound effects during the game. Instead, you get a really rather sweet soundtrack which plays continuously (until you bury that hatchet into the keyboard).

OK, that's enough nastiness at the expense of poor little Puff. It's yet another platform arcade game, but it's a pretty good one.

Rod Lawton

Your first record...

Here's how to find and recover the first record in your stolen collection (it's probably the Nolans).

1 You start off on this ledge – head down to pick up a special weapon.

3 Use a bomb on this poor, unsupecting little blob (pull Down).

4 This nasty geek fires arrow at you. Shoot him!

8 And here's the first record (collect the lot to finish the level).



2 Here's your weapon – a bomb! (You actually get loads).

5 This giant whelk is fatal to touch and launches mines. Shoot it in the back.

6 Another nasty that fires arrows. Wait 'til he turns.

7 Ooh look, some fruit left behind by a blasted baddie!

VERDICT

GRAPHICS 75%
Aw... very cute and colourful, but decidedly sluggish movement-wise with clumsy animation.

SONICS 63%
No sound effects, but the sort of tune that finally leaves you chewing the curtains.

GRAB FACTOR 74%
Attractive and easy to get into, but you see straight away it's going to be a bit of a plod.

STAYING POWER 80%
It's addictive enough to keep you coming back to it until you finish the thing. Which will take a while.

DJ Puff's Volcanic Eruptions is standard CodeMasters platform game fare. It's OK, basically.

RATING 72%

Hello! Time for some budget re-releases. This month: Narc, Narco Police, the narkingly bad Badlands and, er, Total Recall. Here's ADAM PETERS...

Action ▸▸ replay

Badlands

HIT SQUAD ■ 061-832 6633 ■ £3.99

I'd never played *Badlands* before, but Rod gave me an idea of what to expect. "When it loads up you'll think the CPC has crashed," he warned, "but it hasn't. The graphics are supposed to look like that." No matter how crap it looks, the graphics are probably the least of this game's worries.

You'd think it wouldn't be possible to mess up a game based on the super addictive gameplay classic *Supersprint*. But if anyone can manage it, you'll have to place your money on Domark, who seem to specialise in crap games (cf *Pit-Fighter*, *Hydra*, *Super Space Invaders*, *Skull & Crossbones*, *STUN Runner* and just about everything else they've ever produced).

It's such a wrench



And indeed, manage it they have. (Good work.) So what's wrong with *Badlands*? Most things really. Removing the reverse function and replacing Up with Fire (as the control for moving forward) hacks to pieces the intricate control method that made *Supersprint* and *Supercars* such delights. What you're left with, when the chiselling is over and the dust clears, is one of the easiest and most pointless games ever.

Your car hasn't got the expected handling problems (control method and slip factor), the opposition cars are precious little opposition, and the tracks are very small and very simple. What can be done then to present some sort of challenge for the competitor? Don't worry, the people behind *Badlands* knew what to do about that. They thought it would be a good idea to put mines and walls of fire on the track. Prats.

It's all about crashing into walls, turning round and then continuing on your journey. And that's it. *Badlands*. With just eight small tracks to snore round it's a bit lacking in 'lands', but as for the 'bad', well it's got that by the bucketload. One for the bin, methinks.

Original release: December 1990
Original publisher: Domark
Original score: 40% (AA65)
Today's view: A good game is a good game is a good game. *Badlands* is a crap game laughingly adapted from a brilliant one.

AA VERDICT 31%

Narc

HIT SQUAD ■ 061-832 6633 ■ £3.99

'Winners don't use drugs' was the slogan on the box when this game first came out. "What about Ben Johnson?" the smart arses asked. No-one had an answer for that. Snappy slogan, though.

The anti-drugs diatribe continues through the game itself, which centres on the battle between the narcotics police and the evil drug barons. Well actually it's more like the battle between one narcotics cop (you) and anyone who happens to cross your path. The unfortunate bullet cushions are normally spaced-out junkies. This begs a question: trying to stop the drug barons is fair enough, but surely shooting the junkies is going to do them just as much harm as the drugs are ever likely to? Oh well, this *is* America, the country where they shoot first and order bagels later.



A quick stroll round the block (and with these graphics it is a block) turns sour.

Narc wins several points for stupidity right from the outset, being a 128K-only tape. So if you've got an unexpanded 464, or non-doctored 6128 Plus, you... er, well you can consider yourself quite fortunate really. This is a sad game.

There are twelve levels of pretty much identical mindless shooting fare. The plot and so forth are soon forgotten in a game so tired and unoriginal that the ill-defined sprites and snail-speed scrolling are all you'll remember it by.

It's boring, it's repetitive, it's unoriginal, it's repetitive, it's dull, it's crap to look at, it's predictable, it's dull, it's unoriginal, it's boring, it's crap, it's repetitive and it's unoriginal. And I'm going to rip the tape to shreds right here... (rip, shred, etc) ...good, I feel better now. As a two-player game this has moderate appeal. On your tod, you're better off talking to the wallpaper.

Original release: May 1991
Original publisher: Ocean
Original score: 60% (AA69)
Today's view: *Narc* reminds me of *Alien Storm*, which is like being reminded of the day your cat died. Aaaaaaarrgh...

AA VERDICT 29%

Narco Police

KIXX n 021-625 3388 n £3.99

Spook! It's this month's second opportunity to join the Drugs Enforcement Agency: narcotics police in the area, part two.

Narco Police is set in the future (February 23rd in the year 2003, about 2.10pm). More than 20% of the earth's population are hooked on drugs, and the evil drug barons (those evil drug barons again, eh?) are about to get a visit. They think they're safe enough on their Central American island, but they reckoned without the Narco Police who are, even as we speak, racing their way *Xybots*-style along some tunnels, their big guns primed and ready to fire.

You can see what the game is like from the screenshot, the only other thing to add is that it's a Dinamic game. 'Dinamic' is a Spanish word which roughly translates into English as 'unspeakably difficult'. The continental software house is renowned for games which look and play fab (*Army Moves*, *Navy Moves*, etc) but which no-one has ever managed to get past level three on without a cheat.



Here's the island where those nasty cigar-chewing cocaine fiends hang out. The gets.



We couldn't get a shot of the game (techie problems, you see) – here's the title screen.

Major irritations with this particular unspeakably difficult game include having bullets or hand grenades propelled towards you by hidden enemies. These enemies are so well hidden, in fact, that the first hint you get of their presence is when your chap screams and falls to the floor in a pool of blood. Yeah, cheers Dinamic.

The 3D scrolling is a bit of a departure from the Spaniards' usual horizontal shooting fare, and while the game is nothing special, compared to most of this month's releases it's a little corker. If only it wasn't so difficult. (I blame General Franco.)

Original release: February 1991
Original publisher: Dinamic
Original score: 68% (AA66)
Today's view: Over-difficult but reasonably fun shoot-em-up with a neat 3D perspective. The sound is crummy, by the way.

AA VERDICT 56%

Total Recall

HIT SQUAD n 061-832 6633 n £3.99

It was a dream you know. Buy the video and fast forward to the bit where Quaid's in the implantation room at Rekall. The geeky assistant looks at the memory chip and says: "Mars with a blue sky? That's a new one." See, conclusive proof. (*Write in if you know what Adam's on about – ed.*)

Total Recall is one of Ocean's famous pick 'n' mix movie licences. Of the five levels, three are platform-based and the other two are racing gamelets. The first level immediately points to how classy this program is. You'd expect a platform level in a pick 'n' mix game to be fairly small with only the simplest of objectives; basically, make your way to the other end of the level.

Not so the first level of *Total Recall*, which is an excellent mini-game in its own right. There are five objects to be collected en route, and as well as all the running, jumping and shooting, there are various pads and levers around that have to be triggered in the right order if you're to get past the hazards. It's best described as a 'puzzly, platformy, shoot, beat and collect-em-up'.

And there's another four levels to come! Both driving sections are horizontally-scrolling death on the freeways affairs, with more than a little similarity to each other. There's someone on your tail, lots of big trucks in the way, and you run out of fuel if you don't collect the fuel power ups you'll find scattered around.



Choices. To the left: the drummer from The Farm. To the right: a big Mastergame logo.

Work, rest and play



Total Recall is basically two different games, repeated a few times (with minor adjustments) and bunged into a single box. The third and fifth levels are the same as level one, except the enemies dress differently. And that's it.

The depth of the platform elements puts this ahead of *Terminator 2* at the top of the Arnie games' league table. (*Red Heat* comes third, well ahead of *Predator*, with *The Running Man* too crap to even qualify.)

TR is not going to win any awards for originality, but it's very professionally done and great fun to play. And that's what matters, right? You bet.

Original release: April 1991
Original publisher: Ocean
Original score: 91% (AA68)
Today's view: One of Ocean's best movie licences ever. The platform levels are a real treat. A jolly good show all round.

AA VERDICT 90%

Amstrad Action Superstore

Back issues



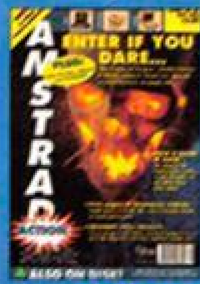
ISSUE 77 • £2.50
Seymour Take One and Firelord on the covertape, plus a football forecaster and fonts for DTP. *Paperboy 2* and *WWF* reviewed, plus special feature on the French CPC market.



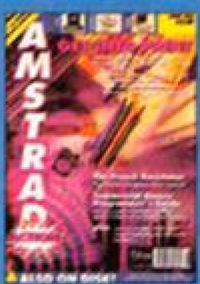
ISSUE 78 • £2.50
Space Crusade demo on the covertape, plus *The Sphinx Jinx* and *Shockway Rider* (complete games). Public domain special, *Hudson Hawk* reviewed, readers' art.



ISSUE 79 • £2.50
New-look issue. Brand new *Technical Forum* section starts. *Ranarama* and *Maze Mania* on the covertape. *Blues Brothers* mastergame, plus compilations.



ISSUE 80 • £2.50
Stryker and the Crypts of Trogan – a budget game which uses the cartridge hardware of the Plus! (Demo on the covertape) New series on how a game is made, plus poll results.



ISSUE 81 • £2.50
Fanzine special: what they are, how to produce them, the best DTP progs and more. *Addams Family* demo plus *Forbidden Planet* on the covertape. The best French software reviewed.



ISSUE 82 • £2.50
Lemmings, The Addams Family and *Bonanza Bros* reviewed. DTP program PowerPage on the covertape and playable *Lemmings* demo. *Buyers' Guide* to art packages.



ISSUE 83 • £2.50
On the tape: *Tetris* game, music composer, *Defenders of the Earth* full game. In the mag: Report on a software shopping trip to France, footie strategy games, AA82's *Type-ins*.



ISSUE 84 • £2.50
Famous Five on the covertape, lightpen hardware project, colour printing special and three-page *Hideous* review. Plus Virtual Reality special & the best 3D CPC games of all time.

Sorry, sold out!
Issues 1-54, 56-65

ISSUES STILL AVAILABLE:
Issues 55, 66, 68, 71, 72, 73, 74,75, 76

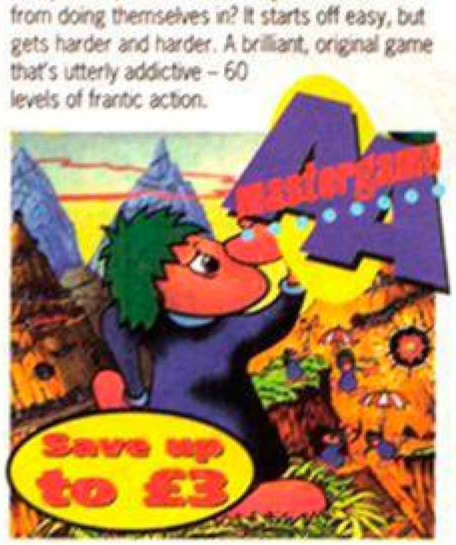
UK price original cover price

OVERSEAS PRICES Europe £5, Rest of world £7

Postage & Packing £1 per order*
*Regardless of size of order

LEMMINGS
Psygnosis

Can you stop hundreds of furry little mammals from doing themselves in? It starts off easy, but gets harder and harder. A brilliant, original game that's utterly addictive – 60 levels of frantic action.



Description	Price	Order No
Lemmings Cass	**£13.99**	**AALEMC**
Lemmings Disk	**£16.99**	**AALEMD**

PROTEXT
Arnor

Protext is arguably the best word processor you can buy for your Amstrad (it's the one that is used by the AA editorial team). It's very fast and is packed with features. It also allows comprehensive file-handling (full disk management) from within the program. Can be 'expanded' with Prospell, Promerge and Protype packages, available from Arnor. Works on 464 and 6128 • **DISK ONLY**.



Description	Price	Order No
Protext Disk	**£19.95**	**AA674D**

MINI OFFICE II
Database Software

Word processor, database, spreadsheet, label printer, graphics and communications – a fabulous all-in-one pack at an amazing price!



Description	Price	Order No
Mini Office II Cass	**£13.99**	**AA670AC**
Mini Office II Disk	**£15.99**	**AA670AD**

AA BINDER

Keep your valued Amstrad Action magazine collection together in this fabulous bright red binder. Equally at home on a brass mantlepiece or the floor of a dingy bedsit; buy a binder and treasure your magazines for life...



Description	Price	Order No
One binder	**£5.99**	**AA417R**
Two binders	**£11.00**	**AA4172R**

HOTLINE 0458 74011

AMSTRAD ACTION MAIL ORDER

Name ______________________

Address ______________________

Postcode ____________ Phone number ____________

Method of payment (please circle) Access • Visa • Cheque • PO

Credit Card No ______________________

Expiry date ____________

Please make all cheques payable to Future Publishing Limited

Description	Price	Order No
TOTAL ORDER		

● For overseas orders call Claire Bates for prices on 0458 74011

SEND THIS FORM TO: Amstrad Action, Future Publishing Ltd, Freepost, Somerton, Somerset, TA11 7BR

No stamp required if posted in the UK, Channel Islands or the Isle of Man

Cheat mode



Starting this month, a new pokes request spot PLUS more keypress cheats, a complete solution for Hudson Hawk and loads of Lemmings help...

Hero Quest

Lee Rouane of Ashover is becoming a regular character in this columm (even if he has contributed to the "other" Amstrad magazine, we still like him). This month he has a tip for *Hero Quest*: On starting the game, get all your characters killed, and then go back to the main menu. (*That's all I've ever done – ed*) Before you play the game, go to the character select option from the main menu and redefine all the dead characters' names to ones of your own.

Do this for all the characters, then select game from the main menu.

On restarting, all your characters will be alive again, but with a body point of zero. However, lead your character into a booby trap or trap door in the floor and you now have infinite body points. Do this for all the characters and you can carry on as normal and complete the quests.

Pang

Christopher Allen Of Market Harborough suggests for the cartridge game *Pang* that if you wait on the title screen until the demos have finished and the title screen has come around again you get 4900 points... if you wait for it to go around twice you get double points! Wait even longer and you get enough points for extra lives... (*ha, you buncha wimps – fancy needing extra lives for Pang! – ed*)

Lemmings

Sale's Mike (doc) Wong hasn't left us for good after all – he's still holed up in an emergency at Holby General. He has come out of retirement to sort out the mastergame *Lemmings*. Apparently there is a bug in the program (the disk version, at least) which means the codes above level 5 are reported as incorrect. Anyway, Wong to the wes... err, rescue. If you have a Multiface then you can put it right by poking &98C8 with &3C. The level codes are:

01 BEJHLDHBCP	02 MJHLDHBCCY
03 NHLDHBEDCV	04 HLDHBMNECO
05 LDHBEJLFCX	06 DHBMJLLGCQ
07 HBENLLDHCN	08 BMNLLDHICW

More keypress cheats!

WINNER! £10

As promised in last month's issue, we've got the second wave (another seven!) of keypress cheats comes from the amazing Multiface of Keypress King Paul Harper, from Folkestone.

Havoc by Players: At any time during the game hold down the keys ARN together for invulnerability.

Shark by Players: At any time during the game hold down Z and the full stop "." on the keypad to load the next level.

Jungle Warfare by Mastertronic: Press SHIFT and P to pause the game, then type JASON. Pressing P will restart the game with infinite lives.

Megabucks by Firebird: At any time during the game hold down the keys "M", "<" and ">" and press any cursor key to see the screens.

Tomcat by Players: On the title screen hold down the keys GDAY and a message GDAY BRUCE appears, then you can play the Tomcat upside down (Australia, geddit?).

If you hold down the keys again on the title screen it will be put right.

Realm by Firebird: At any time during the game hold down the keys SHIFT (TAB) and F9 and you will complete the game – it doesn't do anything else, but there you are, what do you want, blood? (*Yes, yours – ed*)

Stairway to hell by Powerhouse: During the game press the right cursor to enter the next screen and the left cursor to go back a screen. Each time you do this a live will be awarded to you.



Ha ha – can't even get off Level One in SHARK, eh? Well with this keypress cheat, you can!



Making megabucks has never been easier (well, not much easier), thanks to this little cheat from Paul Harper.



Want to fly upside-down in TOMCAT? (Also known as Breakfast Revisited.) We tell you how! (But not why.)

09 BEJHMDHJCY
10 MJHMDHBKCR
11 NHMDHBELCO
12 HMDHBMNMCX
13 MDHBEJLNCQ
14 DHBMJLMOCJ
15 HBENLMDPCW
16 BMNLMDHQCP
17 BEJHLFHBDS
18 MJHLFHBCDL
19 NHLFHBEDDY
20 HLFHBMNEDR
21 LFHBEJLFDK
22 FHBMJLLGDT
23 HBENLLFHDQ
24 BMNLLFHIDJ
25 BEJHMFHJDL
26 MJHMFHBKDU
27 NHMFHBELDR
28 HMFHBMNMDK
29 MFHBEJLNDT
30 FHBMJLMODM
31 HBENLMFPDJ
32 BMNLMFHQDS
33 BEJHLDIBES
34 MJHLDIBCEL
35 NHLDIBEDEY
36 HLDIBMNEER
37 LDIBEJLFEK
38 DIBMJLLGET
39 IBENLLDHEQ
40 BMNLLDIIEJ
41 BEJHMDIJEL
42 MJHMDIBKEU
43 NHMDIBELER
44 HMDIBMNMEK
45 MDIBEJLNET
46 DIBMJLMOEM
47 IBENLMDPEJ
48 BMNLMDIQES
49 BEJHLFIBFV
50 MJHLFIBCFO
51 NHLFIBEDFL
52 HLFIBMNEFU
53 LFIBEJLFFN
54 FIBMJLLGFW
55 IBENLLFHFT
56 BMNLLFIIFM
57 BEJHMFIJFO
58 MJHMFIBKFX
59 NHMFIBELFU
60 HMFIBMNMFN

Lemmings (2)

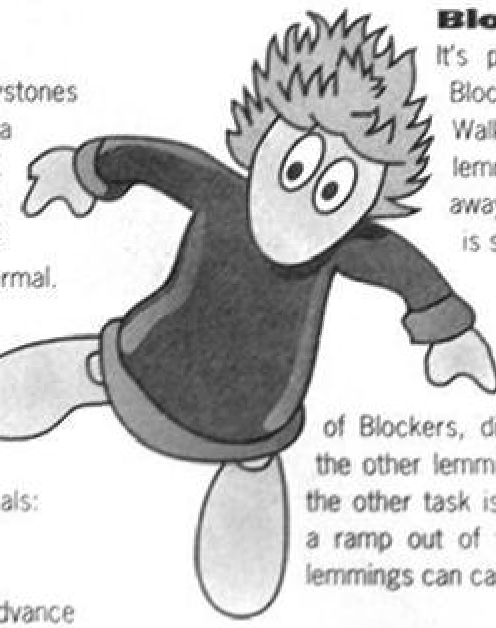
Failing all that, Jamie Turpin of Greystones (across the sea in Ireland) has discovered a keypress. Hold down the keys SHIFT,Z,E and X on the screen displaying the current level, and the level will increase. Do not extend it past 60 – it does not return to normal.

Lemmings (3)

Our third and final wodge of *Lemmings* help is from Gordon Masson of Nairn. Here's what he reckons you should do with your suicidal little pals:

Climbers & Floaters

For both Climbers and Floaters, click in advance because it's harder to click on lemmings when they are close to the object or falling. But keep an eye on Climbers as they have a habit of climbing to their own demise.



Blockers

It's possible to turn Blockers back to Walkers if you get a lemming to dig away the ground he is standing on.

Blocker-less?

If you run out of Blockers, dig a pit to trap the other lemmings then, when the other task is finished, make a ramp out of the pit and the lemmings can carry on.

continued on page 54

Hudson Hawk solution

Ben Garside of Southampton will be surprised to see his solution for *Hudson Hawk* here in October's *Cheat Mode* – I have had it since February! Better late than never, eh Ben?

Level 1

Subgame 1: At the start, stay off the ground as much as possible and avoid the dog. To get up to the open window use the two crates at ground level. Push the first on to the lift and the second to the left of the door. Drop the first on to the second, keeping the crates on the screen at all times. Push the crates along and press Up to climb. Use the other crate as a boost to get to the open window. Stand to the right of the window and press Up to finish.

Subgame 2: Be careful of the plugs. Jump over those below the skirting board and crawl under those above. Use the crate to climb over the higher objects. Don't tread on the black and white floor tiles.

Subgame 3: Use the sofa to bounce over the black and white floor tiles. Wait for the bloke with the gun to turn around, whilst standing on the pile of crates. Then throw a ball at him. Don't fall down the hole between the two chests of drawers or you'll be sent back to the start of the game.

Subgame 4: Start by going to the right. Jump over the electricity thingies and watch out for the steam pipe. Go up once and jump onto the next ladder (if you miss you get frazzled). To turn off the fan touch the switch at the bottom of the stairs. Go as quickly as possible because all of the switches are on a timer. Continue through, but be careful of the steam pipes at the end.

Subgame 5: Wait at the beginning for two blokes with guns. Lie flat on your stomach and throw balls at them before you go past the laser gun.

Level 2

Subgame 1: Fall to the left and climb the steps to the right. Go past the first set of stones and climb the second to the top. Go left, collect the money, then right. Kill the bad guy by lying flat and throwing your ball. Jump off at the end and climb the ladder to finish.

Subgame 2: At the beginning go right down. At the first junction go up the ladder to the very top, right, then up. Go left, up then across the tightrope. Beware of the large drop following, keep pressing Right and enter the uppermost tunnel. Go down, right and down again, then right into the tunnel with spikes coming from the floor. To turn off the fan go down the ladder and flick the switch. Run as soon as possible.



Subgame 3: Fall straight to the very bottom of the screen. Jump over the dark blue (dark green if you have a green screen) soil and kill the baddies immediately above and in front of you. Avoid all bombs dropped by the two parachutists and then climb back up to the tightrope.

Subgame 4: Avoid the different coloured floor tiles, lie down and shoot the baddies. Go down the ladder at the far right and jump over the up arrows. Go along to the end and through the hole in the floor. To kill the thingies that throw bombs, keep them at the edge of the screen, stay clear of the bombs until they have exploded, then throw tennis balls. Also, avoid floor tiles below the posts by jumping over them. Go right down a ladder, then left, killing two other baddies, and then down a further ladder. Avoid treading on the floor at this stage, use the bricks to walk across.

Level 3

Subgame 1: Climb up the stages, avoiding falling objects. Use the ball to burst the balloons held by baddies. At the top go right, up the lift and then left.

Subgame 2: Fall down, but not too far, and then climb back up the white platforms. At the top, go left and onto the tightrope. Beware – there is a monkey on the rope. Go left, fall down, and run left avoiding falling objects. Climb up the stages and the ladder. Go right, avoiding the pikes. Use the crate to boost your jump to climb the ladder and finish.

Subgame 3: Ignore the fat man in white at the start. Go to the far left and climb the stages, avoiding the enemy ball by continual movement in different directions. At the very top, go right and jump into the window to finish. Do not use the lift.

Subgame 4: Push the crate near the top right to the left and on to the lift. Take it up two stages using the lifts, and then push it off to the right. Use it as a boost to jump up and finish.

Subgame 5: Fall down and push the crate to ground level. Push it to the far left. Go right and up. Flick the time switch, jump across and fall down to get the crystal. Throw the ball at the switch in the bottom right corner. Run quickly left, flick the switch and climb the ladder. Go across the tightrope and jump across to open the door. You've done it!

Covertape pokes

Multimixx 4 (tape), Super Seymour (tape), Puffy's Saga, AA80 covertape (Anarchy & Stryker)

Wherever would we be without our regular hackers on the search for those elusive pokes? Without a poke section that's where!" (I've forgotten how to do them!)

Street's Graham Smith (I was down at Glastonbury for a few days in the summer, Gray, did you get to the festival?) has whipped up some more tape crackers for us in the shape of *Multimixx 4*, which gets 500 health points for 1 portion of food on all games. *Super Seymour* saves the planet – but only if he gets infinite lives, and *Puffy's Saga* gets an extra dose of energy per portion of lamb. Last, but by no means least, is the complete *AA80* covertape poke, giving infinite lives on *Stryker* and *Anarchy*. Keep 'em coming Gray.

Bombfusion

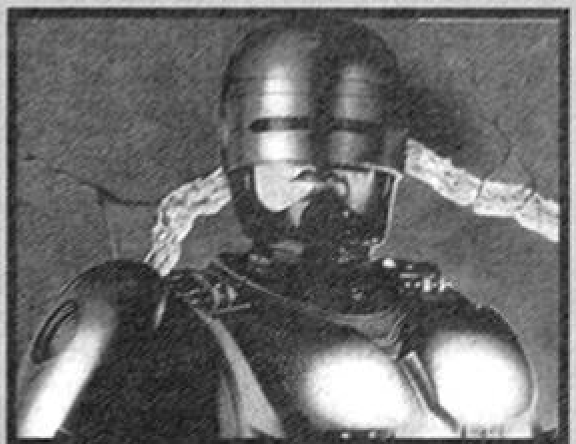
Andy Price has been hanging on to this tape poke for *Bombfusion* which redefines the first four levels and gives infinite lives. He wrote it back in 1990 but it hasn't seen the light of day until now (mainly because I forgot to put it in!).

Request spot!

Your letters for requests have been flooding in. Now, this is where it gets very messy! Most of the pokes we have used in the past were written for the original tape games. It's becoming apparent that some of the loaders, and even games have been changed when they were re-released on budget titles (Red Heat is one of the casualties – sorry to those who wrote). So... I'll do my best, but can't actually promise that the pokes will work on the version you own.

Anyway, totally undaunted by trivialities, here is this months wealth of cheatery from the *Cheat Mode* vault (under a blanket in my bedroom, actually!).

• All pokes for tape versions



Saps your energy, being a semi-robotic cop – but not with this poke.

1) Robocop

This was a pretty classy game in its day – this poke stops the energy bar from sliding down. Get Boddicher!

2) Frankenstein Jnr

This is an early poke from Andolpho Price. It removes the ghosts and makes life last so much longer.



Oi, ya buncha wimps! They say you need more time at the Combat School!

3) Combat school

Back in '88 it was printed in *AA29*, but one or two of the numbers got switched (!). So after only four years here is the correction... The poke allows you to slow the timer.

4) R-Type

Another Mike Wong poke from back around *AA43*. This poke also found it's way into the *Cheat Mode Revenge* book, but don't let that put you off! Select the cheat you need from the program.

5) Wonderboy

A (good old) Graham Smith poke from back in *AA60* – it supplies infinite lives.

Multiface Masterclass



Masterhackers Lee Rouane of Ashover and Paul Harper of Lowestoft dish the dirt on this month's batch of games...

NAME		ADDRESS	POKE	EFFECT
Classic Axiens	(t)	308D	A7	Inf. lives
Classic Muncher	(t)	09E9	C9	Inf. lives
Impossamole	(t)	261C	00	Inf. energy
Batman 3d	(t)	1C90	00	Inf. lives
Shockway Rider	(aa)	9181	no	No. of lives
Licence to Kill	(t)	81AB	No	No. of lives
Live and Let Die	(d)	7402	01	Inf. fuel
		5b67	00	Invulnerability
Overlander	(d)	1815	00	Inf. lives
Insector Hecti	(t)	4E74	00	Inf. time
		4F2F	00	Inf. lives
		4F22	50)	50 shots per level
		7F0B	50)	
Navy Moves	(t)	7D01	FF	255 lives
Gunfighter	(t)	33EC	A7	Inf. lives
		3308	A6	Inf. bullets
Op Thunderbolt	(d)	18FF	00	Inf. bullets
		5362	00	Inf credits
		DFE9	00	Inf. time
The plot		1C62	00	Inf. fuse
Tir Na Nog		9ACE	00	Invulnerable
		A083	18	Unlocks doors
Marsport		7456	18	Unlocks doors
Fairlight		75AB	18	Unlocks doors
		6F88	00	Inf. life
Fairlight 2		3865	18	Unlocks doors
		3208	00	Inf. life
		3E73	00	Inf. Brooch (1)
		3EB5	00	Inf. carpet (2)
Bombfusion		4A72	00	Inf. lives
		4935	00	Inf. time
Auf Wiedershen Monty		ADB3	00	Inf. lives
Knightmare		3967	C9	Inf. Candle

The Multiface Way

Good grief, what's all this gibberish in this box, then? Well, it'll all make sense to anyone who has one of Romantic Robot's Multifaces. These little black boxes plus into the back of your machine and let you 'freeze' games and then cheat!

The (t)s and (d)s before the address indicate whether the poke was written for a tape or disk game (they might work on both, it's worth a try). Just in case you don't already how to put in these BLACK BOX POKES, here are the steps to success.

a) Load the game as normal.
b) Press the RED button on the MULTIFACE.
c) Press "T" for tool.
d) Press "*" to make sure you select the code.
e) Press "H" for HEXADECIMAL input.
f) Press "SPACE" for input.
g) Type in the ADDRESS (4 characters, e.g. 3A7C)
h) Type in the POKE (two characters, e.g. A7)
i) Press "RETURN"
j) If there is more than one poke goto (f)
k) Press "ESC" back to the menu.
l) Press "R" return to the game.

Traps

If you can't avoid a trap, compact a lot of lemmings together and only a few will die when they go through a trap – lemmings die one by one.

Falling

Lemmings can't fall too far, so when building long ramps, build another ramp parallel so that if any lemmings fall from the main ladder they will fall to the other one and survive.

Puzznic

Frankie Grieco of Wimbledon Chase has a cheat for Ocean's pernicious puzzler *Puzznic*. "While you're playing," he says, "press R to enter the retry menu and type HELPME. Then press N at any time to skip stages."



Fed up of being stuck on the same old stage in Puzznic? Frankie Grieco knows a way out...

We want your cheats!

Nearly all of the cheats, hints, tips, solutions and pokes in this section are sent in by our readers. We pay £20 for each poke we use on the cover-tape, and £10 for the best of the tips printed inside the magazine.

So what are you waiting for? Now's your chance to achieve fame and fortune (*hey, easy on the fortune! – ed*) via the pages of *Amstrad Action*. Send your cheats etc to:

Cheat Mode
Amstrad Action
Beauford Court
30 Monmouth Street
Bath
Avon BA1 2BW

Don't forget to include a stamped SAE if you want your material returned. With maps, remember that these pages are black-and-white, so don't spend ages drawing in colour!

● Don't forget! If you desperately need specific game poke, write in to the POKES REQUEST spot at: *Cheat Mode, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW.* There's also the HELP! column (opposite) for all your other queries ■

HELP!

If you're stuck on a game, or you simply can't get hold of an old classic, send a postcard (or write on the back of an envelope) to:

Games Helpline
Amstrad Action
Beauford Court
30 Monmouth Street
Bath
Avon BA1 2BW

Wanted: *Lemmings, North and South* and others (preferably on disk). Will swap with *Soccer Stars, Wrestlemania* and loads of others.
Neal, 0602 734438

Would someone wish to do a swap/lend me *Sly Spy* tape or disk, and I will give you two of these five: *Terminator 2, WWF, Shadow of the Beast, Bart Simpson vs The Space Mutants* (all on tape with cheats) and *Golden Axe* (disk).
Alex, 021 745 8841

I am trying to get a copy of *Gazza* for the GX4000. I will pay £25 for a second-hand copy.
James, 0256 880557

Can anyone solve level 27 on *Lemmings* for me? I'm stuck!
Len, 0602 293765

Wanted: *North and South* for *Shadow Dancer*.
Simon, 0270 589698

How do I get the pearl in *Mermaid Madness* (from Electric Dreams) without getting trapped?
Paul, 021 580 0458

Wanted: Loriciel's *Skweek* on disk.
Pete, 0621 854093 after 5pm

Help needed on *Spellbound Dizzy*. I can save Dylan and Grand Dizzy, but I can't get any further.
Graham, 087 64611

Desperately wanted: *Indiana Jones and the Last Crusade* or *Final Fight*. Will pay up to £5.
Kiranna, 081 453 0262

Desperately needed: all Multiface cheats since they started. (*You must be joking! – ed*)
Todd, 0630 655599

Help! Can anyone tell me how to get out of the first two rooms in *Knightmare*. I'm desperate!
Carl, 0423 888769 after 6pm

I need a cheat or poke for *The Untouchables* on disk.
Scott, 0326 250666

Has anyone got a copy of Mike Singleton's *Lords of Midnight* for the 6128? Preferably disk but tape's fine. Will swap or pay reasonably.
Rosemary, 0697 351032 after 5pm weekdays

Can someone please tell me where I can get *Thunderbirds* on disk? Tips for *Spellbound Dizzy* would also be helpful.
Richard, 081 859 1350

How do you get past the shark in *Everyone's a Wally* without getting killed?
Colin, 091 373 4825

Desperately wanted: *Rick Dangerous 2* on disk.
David, 0292 41721 after 6pm

Help needed on *Spellbound Dizzy*. How to get past spare ore crusher? Where is Dozy?
Val, 0744 53804 5-9pm Monday-Thursday

Wanted: *Double Dragon 1* and *Seymour goes to Hollywood* (tape originals). For *Ninja Commando* and *Football Manager* and *Football Manager World Cup Edition* (tape originals).
Stephen, 0698 827177

Wanted: *Elite* on disk. Will pay.
0623 747346 after 6pm

Help wanted on *Xenon*. How do you destroy the first sector guardian?
Alex, 0344 776502 after 3:30pm

Desperately wanted: *Shadow Dancer* on tape.
Matthew, 0942 727297

Wanted: *Bards Tale* or *Lords of Chaos* tape/disk.
Thurstan, 081 940 8877 after 5pm

Wanted: *Dan Dare* for the 464.
Stan, 0533 834246

Help wanted on *Platoon*. I can not find my way out of the tunnel network, has anyone got a map?I can offer help with *Dizzy 1, 2, 3* and *4*.
Sean, 0532 441386

Help! In *Spellbound Dizzy*, where are the yolkfolk except Dylan and Grand Dizzy, and how do you rescue them?
Huw, 0929 436208 after 4pm

Games wanted: *Double Dragon 3, Out Run Europa* and others. Will swap *Rick Dangerous 2, Terminator 2* and others.
Wayne, 071 700 0715

Does anyone know where the secret room in *Rainbow Islands* is?
Daniel, 0209 890264 4-6pm

I need the password to Level Two of *Saigon Combat Unit*.
John, 0382 553557 4:30 - 9:00pm

Has anyone got a cheat for *Arkanoid*, as I cannot get past Level 9. Help given on *Saigon Combat Unit* (*hey, ring the guy above! – ed*), *Batman the Movie* and *Dizzy 1 & 5*.
Stuart, 0383 510609

FREE! FROM SILICA



When you buy your new Atari 520, 1040 or Mega ST-E computer from Silica Systems, we will give you an additional £324.75 worth of software FREE OF CHARGE, including some great entertainment and productivity programs. These free gifts will introduce you to the world of ST computing and help you to get off to a flying start with your new ST. Plus, with every ST and TT, we will give you 16 nights holiday hotel accommodation for you and your family to enjoy a break at home or abroad.

TENSTAR PACK:

ASTERIX	£24.99
CHESS PLAYER 2150	£24.95
DRIVIN' FORCE	£19.95
LIVE AND LET DIE	£19.99
ONSLAUGHT	£24.99
PIPE MANIA	£19.99
RICK DANGEROUS	£24.99
ROCK 'N' ROLL	£19.99
SKWEEK	£19.99
TRIVIAL PURSUIT	£19.95

16 NIGHTS HOLIDAY
HOTEL ACCOMMODATION

Every Atari ST from Silica comes supplied with a free 72 page colour brochure with accommodation vouchers. These entitle 2 people to stay up to a total of 16 nights in any of 250 hotels with accommodation FREE. All you have to pay for are your meals (prices are listed in the brochure).

PRODUCTIVITY PACK:

1st WORD Word processing package from GST	£59.99
SPELL IT Spelling checker to complement 1st Word	£19.99
ST BASIC Basic programming language with tutorial	£24.99
TOTAL VALUE:	£324.75

WORTH NEARLY £360!

NEW! ATARI ST



520ST-E START PACK

The perfect introduction to home computing

PLUS! FREE GIFTS FROM SILICA
(SEE PANEL ON LEFT)

HARDWARE:	
520ST-E Computer 8MHz 16-Bit 68000 CPU, 512K RAM, Mouse, TV Modulator, Internal PSU, 1Mb Floppy Disk Drive	£299.99
SOFTWARE - ARCADE CLASSICS:	
Missile Command - Shoot Em Up	£9.99
Crystal Castles - Platform Capers	£9.99
Super Break Out - Wall Demolition	£9.99
Battle Zone - 3D Tank Battle	£9.99
SOFTWARE - PRODUCTIVITY:	
First Word - Word Processor	£59.99
Neochrome - Art Package	£29.99
ANI ST - Animation Package	£29.95
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£784.63
Less Pack Saving:	£525.63
SILICA PRICE:	£259.00

PLUS! 16 NIGHTS HOLIDAY ACCOMMODATION

£259

FREE BROCHURE!

RETURN THE COUPON FOR A FREE COLOUR ST BROCHURE

520ST-E DISCOVERY XTRA



HARDWARE:	
520ST-E COMPUTER 8MHz 16-Bit 68000 CPU, 512K RAM, Mouse, TV Modulator, Internal PSU, 1Mb Drive	£299.99
SOFTWARE - ENTERTAINMENT:	
ESCAPE FROM ROBOT MONSTERS Fight to destroy the robot army	£19.99
FINAL FLIGHT Fast action beat-em-up game	£25.99
NINE LIVES Save Claudette from the mad scientist	£24.99
SIM CITY Take control of your own city	£29.95
SOFTWARE - PRODUCTIVITY:	
CONTROL ACCESSORIES	FREE
VS2 EMULATOR PROCESSOR	FREE
ST TOUR GEM tutorial for the ST	£4.99
FIRST BASIC Basic programming language	£49.99
NEOCHROME Powerful drawing package	£49.99
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£830.63
Less Pack Saving:	£551.63
SILICA PRICE:	£279.00

PLUS! 16 NIGHTS HOLIDAY ACCOMM

NORMAL RRP ~~£299.99~~ **£279**
Ref: STC 6252

1040ST-E FAMILY CURRICULUM



HARDWARE:	
1040ST-E COMPUTER 8MHz 16-Bit 68000 CPU, 1Mb RAM, Mouse, T V Modulator, Internal PSU, 1Mb Disk Drive	£399.99
SOFTWARE MODULES:	
PLAY AND LEARN Prof Plays a New Game with Words and Sentences	£76.59
JUNIOR SCHOOL LEAVER Answer Back/General Knowledge Quiz, Spelling and Primary Maths	£58.54
GCSE Micro Maths, French, and Geography Quiz	£55.54
BUSINESS ST Word, ST Base & ST Calc	£159.85
CREATIVE Hyper Paint II, Music Maker and First Basic	£134.97
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£1210.23
Less Pack Saving:	£861.23
SILICA PRICE:	£349.00

PLUS! 16 NIGHTS HOLIDAY ACCOMM

NORMAL RRP ~~£399.99~~ **£349**
Ref: STC 1250

1040ST-E MUSIC MASTER



The Music Master Pack features one of the most popular computers used by musicians combined with the renowned MIDI package PRO 24 III to provide a perfect environment for novice and professional alike. The acclaimed MIDI Recording and Editing System from Steinberg, PRO 24 III is used by many top musicians including Dire Straits and PWL. Using any MIDI keyboard, PRO 24 offers the ability to write and compose music to a very high standard. You can record up to 24 tracks simultaneously, and then apply real time editing to remove mistakes.

HARDWARE:	
1040ST-E COMPUTER 8MHz 16-Bit 68000 CPU, 1Mb RAM, Mouse, TV Modulator, Internal PSU, 1Mb Disk Drive	£399.99
SOFTWARE:	
PRO 24 III	£150.00
PLUS! FREE FROM SILICA:	
Silica Productivity Pack	£104.97
TenStar Games Pack	£219.78
Total Value:	£874.74
Less Pack Saving:	£525.74
SILICA PRICE:	£349.00

PLUS! 16 NIGHTS HOLIDAY ACCOMM

NORMAL RRP ~~£399.99~~ **£349**
Ref: STC 1261

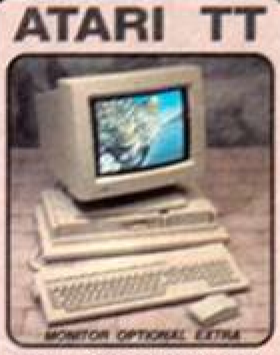
MEGA ST



- 16MHz 16-Bit 68000 Processor
- 3½" 1.44Mb Double Sided Disk Drive
- 1/2/4Mb RAM Versions
- 47Mb Hard Drive Versions Available
- 4096 Colour Palette
- Stereo 8-Bit PCM Sound Output
- *FREE* Silica Productivity Pack
- *FREE* Tenstar Games Pack
- *FREE* 16 Nights Holiday Accom.

	[1Mb RAM]	[2Mb RAM]	[4Mb RAM]
0	£586	–	–
47	–	£985	£1097

ATARI TT



- 32MHz 32-Bit 68030 Processor
- 3½" 1.44Mb Double Sided Disk Drive
- 2/4/8Mb RAM Versions
- Stereo 8-Bit PCM Sound Output
- 4096 Colour Palette
- Built-in 68882 Maths Co-Processor
- Up to 1280 x 960 Resolution
- VME + SCSI Expansion Ports
- Expandable to 36Mb RAM
- Hard Drive Expansion Options
- *FREE* 16 Nights Holiday Accom.

2Mb RAM	4Mb RAM	8Mb RAM
£1169	£1462	£1874

ALL PRICES INCLUDE VAT - FREE OVERNIGHT COURIER DELIVERY IN THE UK MAINLAND

SILICA SYSTEMS OFFER YOU

- ***FREE OVERNIGHT DELIVERY:*** On all hardware orders shipped in the UK mainland.
- ***TECHNICAL SUPPORT HELPLINE:*** Team of technical experts at your service.
- ***PRICE MATCH:*** We normally match competitors on a "Same product - Same price" basis.
- ***ESTABLISHED 12 YEARS:*** Proven track record in professional computer sales.
- ***BUSINESS + EDUCATION + GOVERNMENT:*** Volume discounts available 081-308 0888.
- ***SHOWROOMS:*** Demonstration and training facilities at our London & Sidcup branches.
- ***THE FULL STOCK RANGE:*** All of your requirements from one supplier.
- ***FREE CATALOGUES:*** Will be mailed to you with offers and software/peripheral details.
- ***PAYMENT:*** By cash, cheque and all major credit cards.

Before you decide when to buy your new Atari STcomputer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your ST, when you may require additional peripherals and software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE 081-309 1111

SILICA SYSTEMS

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	Order Lines Open: Mon-Sat 9.00am-6.00pm · No Late Night Opening	**Tel: 081-309 1111** · Fax No: 081-308 0608
LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA	Opening Hours: Mon-Sat 9.30am-6.00pm · No Late Night Opening	**Tel: 071-580 4000** · Fax No: 071-323 4737
LONDON SHOP: Selfridges (1st Floor), Oxford Street, London, W1A 1AB	Opening Hours: Mon-Sat 9.30am-6.00pm · Late Night: Thursday until 8pm	**Tel: 071-629 1234** · Extension: 3914
SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	Opening Hours: Mon-Sat 9.00am-5.30pm · Late Night: Friday until 7pm	**Tel: 081-302 8811** · Fax No: 081-309 0017



Show facts

When? November 5-8, 9.30am-5pm (4pm Sunday)
Where? Earls Court, heart of London
What? Amiga software and hardware plus Sega, Nintendo, PC, ST...
How much? £7 adults, £5 Under 14s (but see Save time and money)
Who? Everyone who's anyone including the Amstrad Action team

Save time and money

Get smart. Getting on for 100,000 people are expected to attend the **Future Entertainment Show.** You know what that means: Queue City. So avoid all the foot-shuffling, hanging-around-for-ages start to the

noney! Bit of

hen regret it

ues and save

085

Tickets

AA/10

I would like to order advance tickets for the Future Entertainment Show and save £1.05 per ticket.

Please send me ____ adult tickets at £5.95 each

Please send me ____ under-14 tickets at £3.95

Total Payment £________

Method of payment ________ ☐ Visa
Please make all cheques ☐ Access
payable to: ☐ Cheque
FUTURE ENTERTAINMENT SHOW ☐ PO

Card number

Expiry Date

Name

Address

Post code

Send this form to: FUTURE ENTERTAINMENT SHOW PO Box 2, Ellesmere Port, South Wirral, L65 3EA

Future Publishing Limited, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW
Tel: 0225 442244
Fax: 0225 446019

Editor Rod Lawton
Staff Writer Adam Peters
Contributors Stuart Whyte, Phil Howard, Jerry Glenwright, Richard Fairhurst, Tim Blackbond
Art Editor Lam Tang
Senior Ad Sales Executive Jackie Garford
Publisher Colin Campbell
Promotions Manager Michele Harris
Promotions Assistant Tamara Ward
Group Publishing Director Greg Ingham
Production Tracy O'Donnell
Subscriptions Christine Stacey, tel: 0458 74011
Circulation Director Sue Hartley, tel: 0225 442244

● **Reader calls:** We regret we have to restrict reader calls to Tuesday afternoons. Technical queries are best sent in by post, as it gives us longer to find the answers.

Printed in the UK

Future PUBLISHING

'Your guarantee of value'

This magazine comes from Future Publishing, a company founded just six years ago, but which now sells more computer magazines than any other publisher in Britain. We offer:

Better advice. Our titles are packed with tips, suggestions and explanatory features, written by the best in the business.
Stronger reviews. We have a cast-iron policy of editorial independence, and our reviews give clear buying recommendations.
Clearer design. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs etc.
Greater relevance. At Future, editors operate under two golden rules:
• Understand your readers' needs.
• Satisfy them.
More reader interaction. We draw strongly on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is like joining a nationwide user group.
Better value for money. More pages, better quality: magazines you can trust.

Home of Britain's finest computer magazines.

Amstrad Action • Your Sinclair • Commodore Format • PCW Plus • PC Plus • PC Answers • PC Format • Amiga Format • ST Format • Sega Power • Total! • Amiga Power • Amiga Shopper and also Classic CD • Mountain Biking UK • Cycling Plus • Photo Plus • Needlecraft • Cross-Stitch Collection • Today's Vegetarian

ABC 35,298
Member of the Audit Bureau of Circulations January-June 1992

Next Month

Of all the issues in all the world, these things just had to walk into next month's...

Money, money, money

It's never funny in a rich man's world, but you'll be laughing all the way to the bank with our special guide to making money with your CPC. Whether it's programming, writing, publishing, typing, accounting, mail-outs, or a PD library, there's moolah to be made. Find out how in *AA* next month...



It's an Art

After our three part DTP series, *Hold the Front Page*, here comes a three part art series, *It's an Art*. Written by *AA*'s art expert, veteran *Gallery* contributor Tim Blackbond, the series will provide you with all you need to know to become an artist *par excellence*. Part one next month...



Make some noise!

Checked out our centre pages music feature yet? It's OK, innit? The feature's not over till the fat lady sings, though, and next month a fat lady (or alternatively, Adam) will be singing on our covertape. Inside the mag, full details of how the CPC was used to produce the song...



Seymour's Wild West

It's probably the most hyped CPC game of all time, as a result of having been the basis of our *How a Game is Made* series (which finished this month). But is it any good? Next month we've got the fuli, objective review. No holds barred, no compromises made. Don't miss it...



November issue out October 15th

Don't miss it!

Amstrad Action is made entirely from recycled jokes, and as such presents no drain on the earth's resources. To support this noble cause, cut out this coupon and give it to your newsagent:

Dear Newsagent, I don't know enough terrible jokes yet, so please reserve *Amstrad Action* for me, starting with the November issue, which will be out on Thursday 15th October.

My name ....

My address ....

....

....

DATEL Electronics

NOW A TOTAL MOUSE/ GRAPHICS PACKAGE FOR YOUR AMSTRAD AT A TRULY UNBEATABLE PRICE!!





Genius Mouse COMPLETE WITH OCP ADVANCED ART STUDIO

SPECIAL OFFER PACK!!

- **Genius Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.**
- **When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...**
- Create an image - shrink it, expand it, move it, rotate it, copy it, colour it, etc., etc.
- Spray patterns or shades, make elastic lines - stretch and manipulate shapes.
- Zoom in to add detail in fine mode.
- Full cut and paste facilities plus excellent printer support.
- Pulldown/icon driven menus for ease of use.
- Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes - so flexible anyone can create superb graphics easily.

TAPE OR DISK FOR 464 OR 6128 (PLEASE STATE WHICH REQUIRED) N.B. 464 NEEDS DK'TRONICS 64K RAM PACK

COMPLETE WITH MOUSE INTERFACE



- The Genius Mouse Graphics System comes complete with the special Mouse Interface to allow super smooth control.
- Attractively styled to match your 464 or 6128 design and colour. Simply plugs into Expansion/Joystick port.

ONLY £49.99
TOTAL PACKAGE INCLUDES GENIUS MOUSE, INTERFACE, OCP ADVANCED ART STUDIO PLUS FREE MOUSE MAT AND HOLDER

FREE! MOUSE MAT AND MOUSE HOLDER (WORTH £12.99) WITH EACH PACKAGE

NEW



LC 200 COLOUR PRINTER PACKAGE

NOW YOU CAN PRINT OUT YOUR PICTURES IN FULL COLOUR!

- The Star LC200 Colour Printer not only prints in Near-Letter Quality for your regular jobs but also prints out your pictures from Art Studio, etc., in genuine colour!
- LC200 is a full Centronics printer so it works with other computers (Amiga, ST, etc.).
- Made possible by Datel's unique colour printer driver - now you can have a hardcopy in up to 16 colours!!
- No more to buy - just plug in and print!!

PACKAGE INCLUDES... STAR LC200 COLOUR PRINTER RRP £299.00
CENTRONICS PRINTER LEAD RRP £9.99
DATEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99
NORMALLY £327.98
COMPLETE PACKAGE NOW ONLY £239.00

COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

- If you already have an LC10 or LC 200 Colour Printer we can supply the Driver separately.

dk'tronics



- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area.
- Ideal for use with the CPM 2.2 etc.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K.
- 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio - see Ad.).
- Bank switching done automatically by software (cassette 464).

64K MEMORY EXPANSION

ONLY £49.99 **64K FOR 464**

DATEL Electronics LIMITED

HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] 0782 744707 CREDIT CARD ORDERS

ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO....

DATEL ELECTRONICS

GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND. FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

DATEL LONDON SHOP



222, TOTTENHAM COURT RD, LONDON, W1. TEL:071 5806460